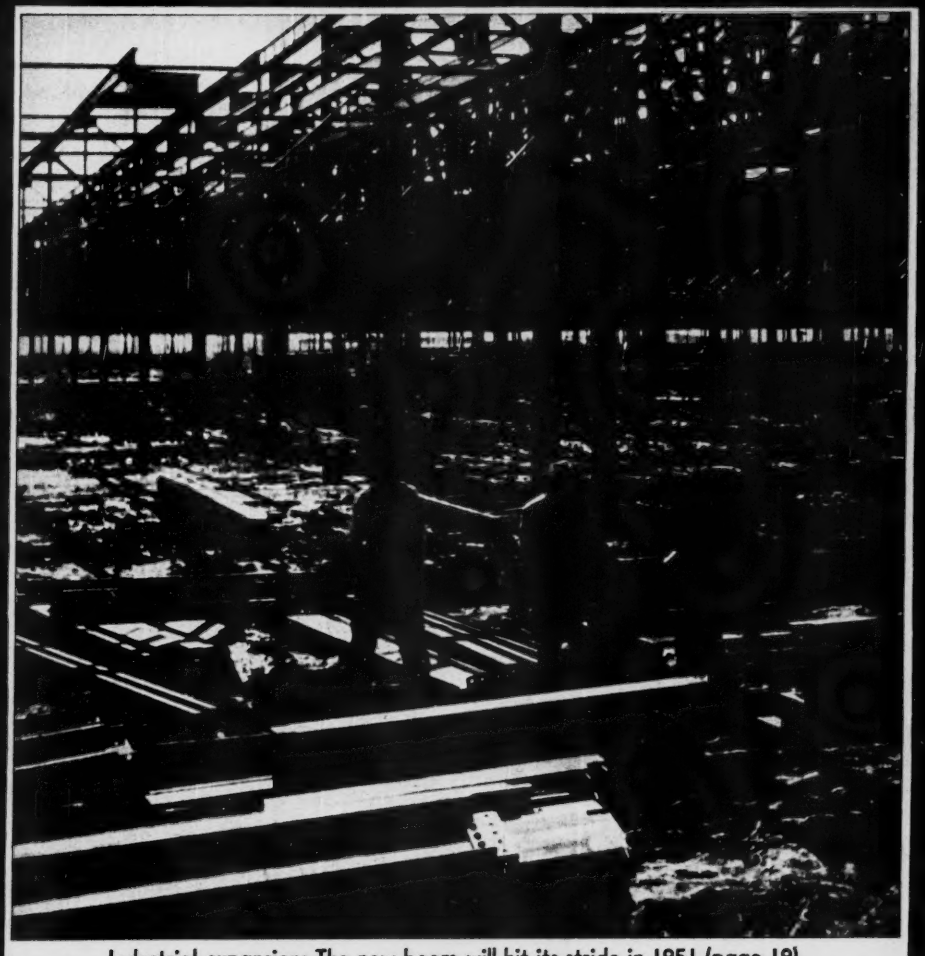
BUSINESS WEEK

Geriatrics

CAN BUSINESSMEN LIVE LONGER?

PAGE 98

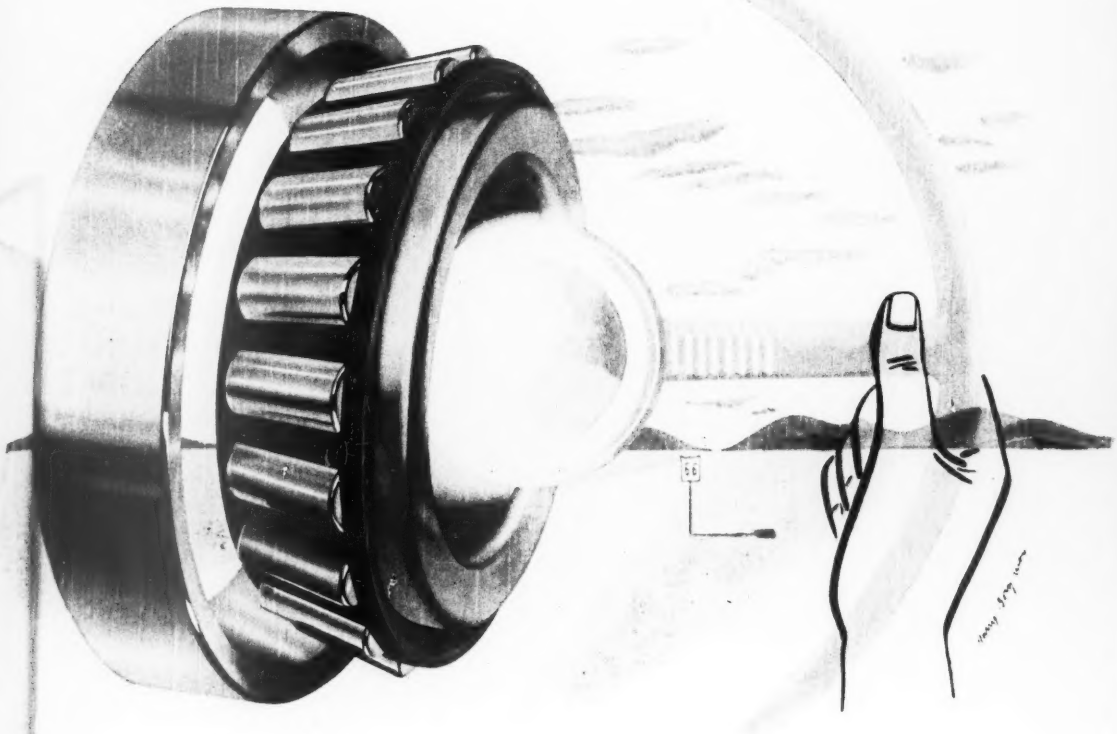


Industrial expansion: The new boom will hit its stride in 1951 (page 19)

NOV 11 1950

BOWER BEARINGS ARE

SPHER-O-HONED



. . . FOR QUALITIES YOU INSIST UPON IN YOUR OWN EQUIPMENT

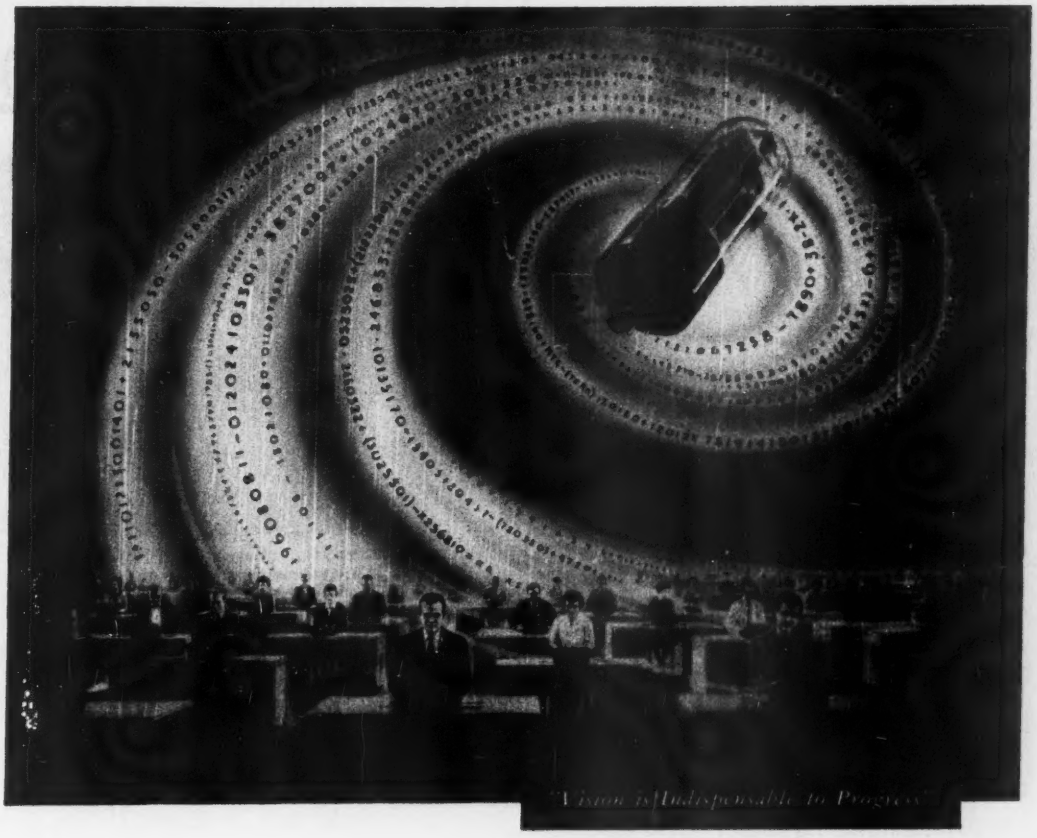
Your constant effort to improve your product may be even further ahead than you think. We've been working on it too. Good bearings contribute many of the identical qualities you insist upon . . . qualities that help make yours a better product. Basic refinements in design and engineering give Bower *Spher-O-Honed* bearings increased dependability—greater precision—extra smoothness. These finer bearings have a nearly inexhaustible capacity for hard work. They quietly absorb continuous abuse, operate almost indefinitely with little or no maintenance. Bower *Spher-O-Honed* bearings are built to the same high standards you demand of your own product. That is why they are your logical choice.

BOWER ROLLER BEARING COMPANY • Detroit 14, Michigan

BOWER

ROLLER BEARINGS

SPHER-O-HONED



Electronic tubes that lift loads of laborious work from office desks!

Yes, this electronic tube represents the miraculous machines that devour mountains of laborious office work at lightning speed!

The load of paper work in offices has mounted at such staggering rates that personnel would be completely snowed under without help from *all kinds of office machines.*

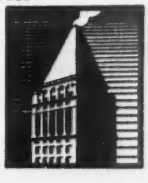
For insurance companies, electronic machines automatically prepare from punch cards the premium-due notices for millions of policyholders—each requiring individual calculations.

Electronic machines are also providing accurate information at low cost for small business. For these firms a "packaged payroll" service is now available, in addition to inventory, bookkeeping and accounting services.

Electric typewriters . . . microfilming equipment . . . dictating machines . . . hand-operated desk calculators . . . and other office machines are *making modern business workable.*

The office equipment industry is on the threshold of almost unbelievable advances. An automatic machine may some day read handwriting and type it out correctly! Scores of other new machines are being planned.

Freedom to exercise initiative and ingenuity makes possible the great achievements of American industry, which in turn give the American people richer, happier, more abundant lives.



BANKERS TRUST COMPANY

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MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

Only STEEL



TWO THAT CRAWL ALIKE. Here you see a doll that actually crawls like its little master. The special spring that makes it do so is made by U. S. Steel—one of millions of American Quality Springs used in mechanical toys every year to bring joy to the hearts of children.



FIGHTING FIRE WITH STEEL. The slender, highly maneuverable extension ladders with which many fire trucks are equipped nowadays, can reach five or six stories into the air without support to save lives and fight high-level blazes. Great strength and light weight are essential in their construction. And U·S·S Cor-Ten Steel provides both of these properties.



CARS PARKED—UNTOUCHED BY HUMAN HANDS. In several cities, new parking garages now park your car electrically, without the car being driven by an attendent at any time. An electric parker scoots out of a high-speed, automatic-landing elevator, grabs your car and hauls it back into the elevator. Then the process is reversed to park the car on upper stories. Tough, oil-resistant U·S·S Amerclad cables, made by United States Steel, supply power for these electric parkers.



500 POUNDS OF COTTON. That's a lot of cotton to compress into a neat, tight bale like this. And the trick is to *keep* it compressed and neat during shipment. For this job, the Cotton Country seems to prefer U·S·S Arrow Cotton Ties . . . tough steel bands that can take tremendous punishment without loosening or cutting through at the buckles.

UNITED STATES STEEL CORPORATION of DELAWARE, 436 Seventh Ave., Pittsburgh 30, Pa. AMERICAN BRIDGE COMPANY • AMERICAN STEEL & WIRE COMPANY and CYCLONE FENCE
NATIONAL TUBE COMPANY • OIL WELL SUPPLY COMPANY • TENNESSEE COAL, IRON & RAILROAD COMPANY • UNION SUPPLY COMPANY • UNITED STATES STEEL EXPORT

can do so many jobs so well...



BIG AS THE SIDE OF A HOUSE. This U·S·S Stainless Steel plate, 220⅛ inches long and 133⅜ inches wide, was used in the fabrication of some chemical processing equipment. It's big, yes . . . but United States Steel can make stainless plates even bigger if they're needed. In fact, U·S·S Stainless Steel comes in hundreds of sizes, finishes, thicknesses and forms . . . from mammoth stainless steel plates like this to stainless steel wire so thin that it's actually finer than human hair.

Listen to . . . The Theatre Guild on the Air, presented every Sunday evening by United States Steel. National Broadcasting Company, coast-to-coast network. Consult your newspaper for time and station.

MANUFACTURED FROM USS STEEL UNITED STATES STEEL

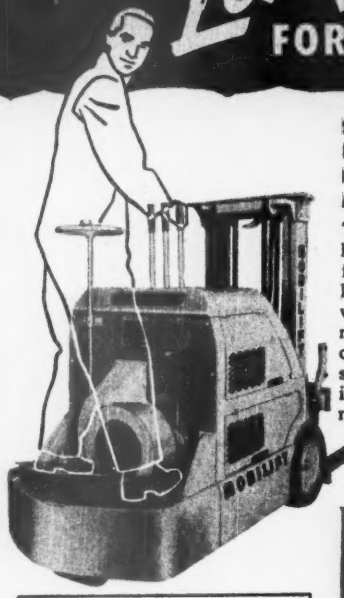
. . . and this label is your guide to quality steel

UNITED STATES STEEL

Helping to Build a Better America

DIVISION • CARNEGIE-ILLINOIS STEEL CORPORATION • COLUMBIA STEEL COMPANY • CONSOLIDATED WESTERN STEEL CORPORATION • GERRARD STEEL STRAPPING COMPANY
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MOBILIFT presents 2 New Lev-R-Matic Drive FORK LIFT TRUCKS



SERVICE-TESTED ADVANTAGES, PLUS NEW MECHANICAL AND DESIGN FEATURES WILL SLASH MATERIALS HANDLING COSTS

The new models "E" and "ER" have all the proven *Mobilift* features including roller chain lift that allows unobstructed view between uprights plus mechanical improvements, new compactness and service accessibility never before possible in any lift truck. Save time and money with *Mobilift!*

STAND-UP MODEL "E": 2,000 lbs. capacity on 15" load center; outside turning radius—57". Shown with 63" mast. (Lift Height—68"; Free Lift—37".)

Grouped 2-Way Levers Perform All Jobs

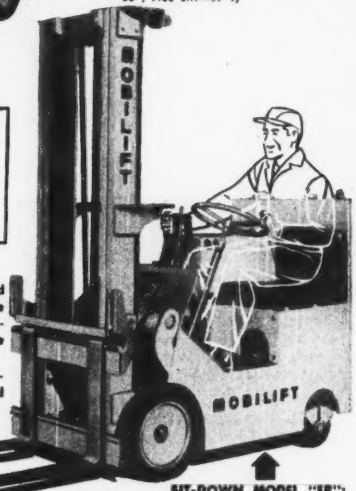


Lev-R-Matic Controls...

secret of speed, ease of operation and maneuverability...PUSH or PULL a single lever to go forward or back...a multiple-disc clutch smoothly transmits positive power instantly.

Roller chain lift and hydraulic tilt mechanism are activated by functionally placed 2-way levers.

NO GEARS TO SHIFT!



Write Today

Get all the specifications and cost-slashing MOBILIFT advantages in the new "E" series Lev-R-Matic Bulletin.

SIT-DOWN MODEL "ER": 2,000 lbs. capacity on 15" load center; outside turning radius—63"; shown with 83" mast. (Lift Height—108"; Free Lift—57".)

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BUSINESS WEEK • NOVEMBER 11 • NUMBER 1106

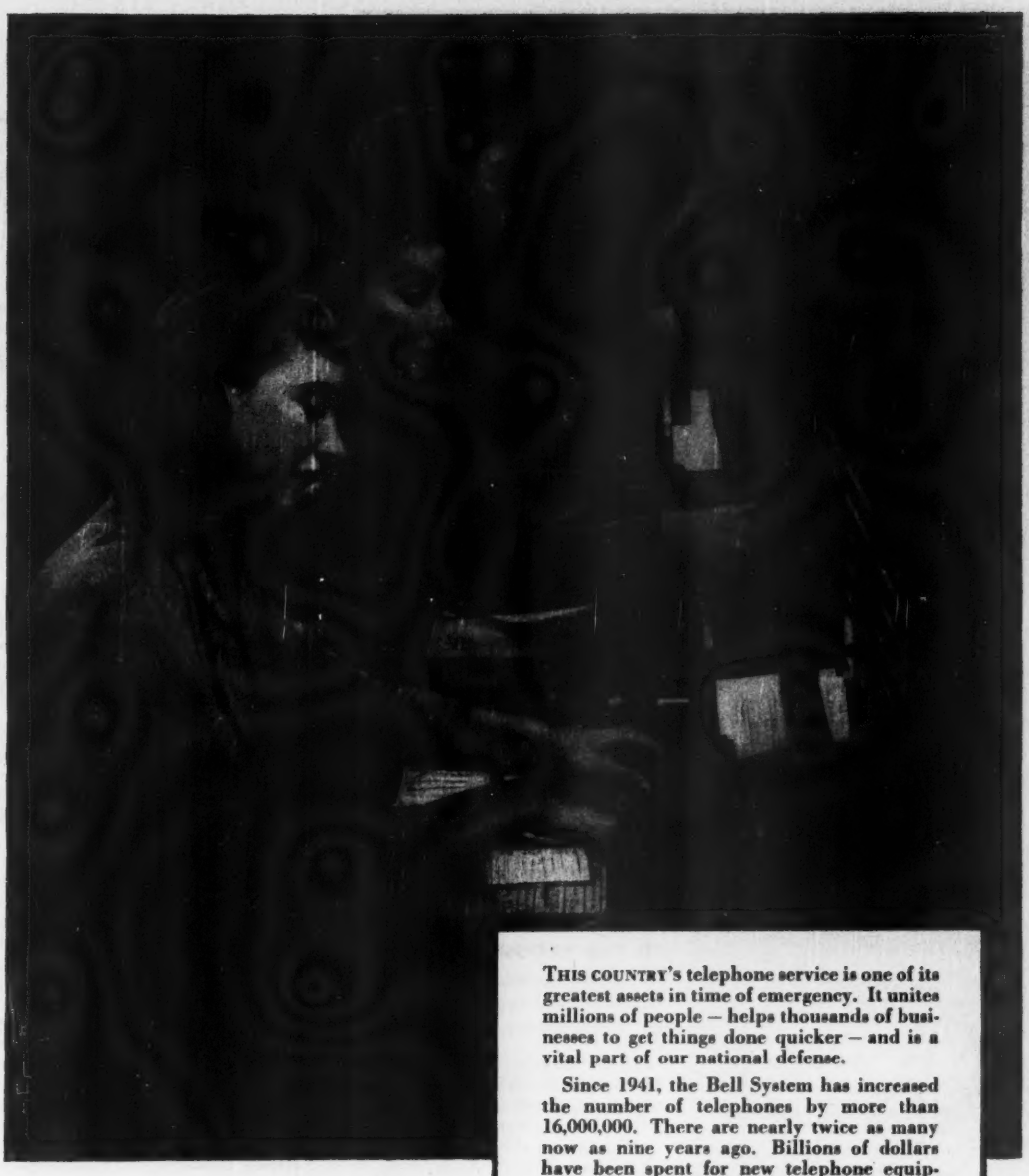
(with which are combined The Annalist and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder • Publication Office 99-129 North Broadway, Albany, N. Y. • Editorial and Executive Offices, 330 W. 42nd St., New York 18 • Curtis W. McGraw, President; Willard Chevalier, Executive Vice-President; Joseph A. Gerardi, Vice-President and Treasurer; John J. Cooke, Secretary; Paul Montgomery, Senior Vice-President, Publications Division; Ralph B. Smith, Editorial Director; Nelson Bond, Vice-President and Director of Advertising.

Address correspondence regarding subscriptions to J. E. Blackburn, Jr., Vice-President and Director of Circulation, Business Week, 99-129 N. Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 18. Allow ten days for change of address.

Subscriptions to Business Week are solicited only from management-men in business and industry. Position and company connection must be indicated on subscription orders.

Single copies 25c. Subscription rates — United States and possessions $6.00 a year; $12.00 for three years. Canada $7.00 a year; $14.00 for three years. Pan American countries $10 a year; $20.00 for three years • All other countries $20 a year; $40.00 for three years • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879 • Printed in U. S. A.

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TELEPHONE LINES ARE HUMMING

THIS COUNTRY'S telephone service is one of its greatest assets in time of emergency. It unites millions of people — helps thousands of businesses to get things done quicker — and is a vital part of our national defense.

Since 1941, the Bell System has increased the number of telephones by more than 16,000,000. There are nearly twice as many now as nine years ago. Billions of dollars have been spent for new telephone equipment of every kind. The number of Bell Telephone employees has increased to more than 600,000.

All of this growth and the size of the Bell System are proving of particular value right now. One reason this country can outproduce any other is because it has the most and the best telephone service in the world.

BELL TELEPHONE SYSTEM

Lamb Electric

MOTORS



As you study your product to find ways to reduce costs and better performance, why not benefit by the experience of many leading manufacturers? Through the use of a Lamb Electric Motor — *specially engineered* for their product — they are gaining the following advantages:

IN THE MOTOR—

1. Reduced cost, weight, space.
2. Exact mechanical and electrical requirements.
3. Thorough dependability.

IN THE PRODUCT—

4. Better performance.
5. Improved eye appeal.
6. Compactness, less weight.

Our engineering department, with a background of thirty-five years' small motor experience, will be glad to work with yours in obtaining these benefits. The Lamb Electric Company, Kent, Ohio.

Lamb Electric

SPECIAL APPLICATION FRACTIONAL HORSEPOWER MOTORS

Highlights
In This Issue

Biggest Boom of All

• BUSINESS WEEK survey finds industry planning to spend more for new plant and equipment in 1951 than ever before. P. 19

A Bird Can't Fly on One Wing

• And won't have to, for a long time anyhow. Stocks of aging whiskey are big enough to keep U. S. drinkers going for years, even though distillers will have to divert part of their output to synthetic rubber. P. 64

Frozen Mercury

• It's not a laboratory stunt, but a workable method of making precision castings. Thompson Products, Inc., is using it for casting intricate turbine parts. P. 85

Biggest Spender and Borrower

• American Telephone & Telegraph clears the decks for a financing operation that is going to set records right and left. P. 110

Can You Can a Commie?

• Not unless your contract with the union permits. Four new arbitration cases demonstrate how hard it is to get a comrade off the payroll. P. 120

"Britain of Asia"

• That's the role Washington now sees for Japan. State Dept. plans a peace treaty that would make the Japanese the bankers, processors of raw materials, and maybe the defenders of the non-Communist Orient. P. 133

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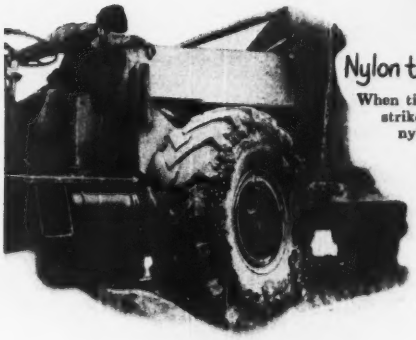
KEEPING UP-TO-DATE ON DUPONT nylon FIBERS

This advertisement is published to keep you up to date on the industrial uses for nylon textile fibers. While demand for nylon still exceeds supply, you may wish to evaluate its possible future applications in your own business. Note: Du Pont makes only the fiber—not the nylon fabric or finished product.



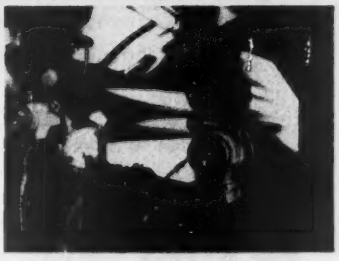
Boiling hot bath can't sap nylon's strength!

This nylon mesh bag, used by canners to hold chicken for making soup stock, gets repeated boilings. Nylon's high wet-strength makes bags last four times longer than those made of other materials. Nylon won't shrink . . . eliminates stretching operations necessary with other bags.



Nylon tires roll with the punch

When tires of heavily loaded trucks strike sharp rocks and deep ruts, nylon cord fabric absorbs blows that might otherwise lead to blow-outs. Nylon carcasses also withstand the punishing effects of extreme highway heat . . . keep tire bodies in better condition . . . permit more recaps.



When paper gets the squeeze

in these huge roller-presses, felt blankets containing nylon take the stress in stride. Nylon's resiliency and high wet-strength reduce strain on these "felts" as they carry wet paper between heavy rollers. Nylon-containing "felts" last up to 50% longer than conventional types. And they allow faster water drainage.

A new low in uniform up-keep!

Nylon uniforms are popular with nurses and are being used more and more in industry. Up-keep is easy; fewer uniforms are needed. Nylon uniforms can be washed one evening, worn next morning. Properly heat-set, they need little or no ironing . . . last far longer.



Note to a busy executive:

Interesting booklet "Nylon Textile Fibers in Industry" provides a quick briefing on nylon's performance in industry. Have your secretary request copies for you —and your key men. The facts it contains may help your company improve a product or production process . . . or create a new product. Address Nylon Div., Room 112, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

For nylon...for rayon...for fibers to come...look to Du Pont

DU PONT NYLON FIBERS

DU PONT

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Cummins® Custom-built Diesels



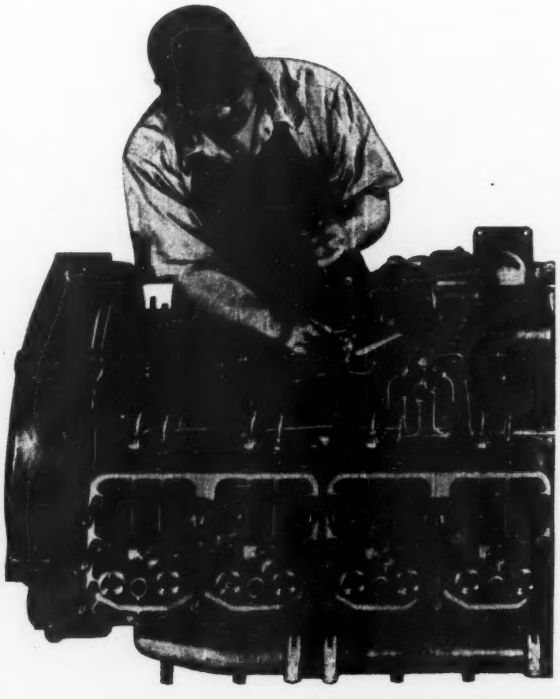
Built not once but Twice

The better-built engine for better power profits

Every lightweight high-speed Cummins Diesel is actually built *twice*. After initial assembly, each engine is run-in on the test block. Then it is torn down and carefully re-inspected — after that it is re-assembled and tested *again* to assure *peak performance*. And that is only *one* example of the extra care, the precision-workmanship . . . that goes into every Cummins custom-made engine.

That's why a Cummins Diesel is an investment that has *greater earning power* for you. The finest of engine-craftsmanship...exclusive Cummins fuel system... and custom-built engines "that fit your job" make a rugged, quality-engineered Cummins Diesel *the better buy for your power needs.*

Contact your Cummins dealer. He has more facts to show you about making more profits with



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Diesel power by CUMMINS

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BUSINESS OUTLOOK

BUSINESS WEEK
NOVEMBER 11, 1950



Businessmen's pleasure at the outcome of the elections does not entirely overshadow their worries about the Far East.

You could see that in the stock market. Prices slumped sharply on Monday, largely due to the turn of things in Korea (and also partly because traders wanted to be on the sidelines until the votes were counted).

Wednesday's sharp spurt in the first few minutes showed that buyers were getting in again. But there was no follow-through (page 118).

•

Industry faces new controls even though the GOP whittled the Fair Deal's congressional majorities to the vanishing point. And it will be subjected to higher taxes.

But labor will be pampered less (page 15). Chances of cutting nonessential federal spending are better. And Truman's social programs are out.

•

Yearend business prospects are improved simply because business sentiment is even sturdier as a result of the elections.

Christmas spending, consequently, is almost certain to set a record.

Meantime farm income has turned the corner. Stockholders are faring the best ever. And employment never before was so high at this time of year.

That adds up to remarkable purchasing power—and retail sales.

•

Retailers have had some anxious moments since their July-August boom.

They placed heavy orders to restock bare shelves. And, as early as the start of last month, deliveries began to pile up in some lines.

Simultaneously, sales fell off from the summer's peak. Unseasonably warm autumn weather slowed the movement of winter merchandise. And people who had deliberately overbought were out of the market.

Thus, while sales gains over a year ago were falling from 25% to 10% and less, store stocks were rising from plus 3% to plus 19%.

Even record holiday sales may leave some stuff for clearance.

•

Department stores have cut down their new orders as stocks have risen. New orders were running almost double a year ago in July. Within a couple of months, stores had so reversed themselves that orders were below 1949.

That helps account for the September-October sag in textiles.

•

With jobs easy to get over most of the country, consumers still aren't worrying about borrowing to buy.

Tighter terms on instalments will, of course, pinch this type of debt. But charge accounts are being used as never before.

These debts, at the start of last month, were $3.7-billion. That's half a billion above a year ago.

And the total is sure to go well above $4-billion by yearend, thus erasing last year's December record of $3.9-billion.

•

Restrictions on charge accounts, even if the Federal Reserve Board decides to invoke them, wouldn't have much effect this year. They would simply limit the length of time the account can remain open. And the due-date for payment wouldn't come until after the turn of the year.

•

October employment figures emphasize the tightness in the labor market

—if, indeed, any emphasis is needed. This is particularly true of nonfarm jobs, which, at 53¼-million, are nearly 2-million over last year.

Meanwhile, unemployment has been cut to 1,940,000—down 400,000 in a month, and more than 1½-million below a year earlier.

Total employment, farm and nonfarm, was 61,764,000 in October, the Census Bureau says. That's off less than seasonally from the summer peak, and the highest level ever recorded for October.

•

High-pay jobs in manufacturing are bound to bring about gradual but important shifts within the labor force.

Factories will get hands—maybe not the best, but hands all the same.

That can be shown statistically (even though the figures oversimplify the problem). Factories employed 2.2-million more people at the wartime top in 1943 than they do now. But nonmanufacturing employment (excluding farms) is 10-million higher now than it was in 1943.

There must be a lot of promising workers among those 10-million now working in construction, trade, service, finance, transportation, etc.

But they won't move so easily as 10 years ago. More job security, greater home ownership, and other factors tend to tie them down.

•

Builders are starting a great many fewer houses than earlier this year. Yet total volume of home building isn't feeling any slump so far.

This, of course, was expected. Houses started earlier have to be finished, and work is being pushed against cold weather.

Thus, value of work done on homes in October was $1.1-billion. That compares with $1.2-billion during the August peak. And last year's top (set in October, incidentally) was only $725-million.

•

If you want to see how much the housing boom fed on easy mortgages, look at these figures from the Bureau of Labor Statistics:

Of all the one-family houses built in the second half of 1949 in nine cities for sale on mortgages, 37% were sold with no down payment. In the $7,000 to $7,900 bracket, 69% changed hands without any down payment.

•

Good weather this fall has improved the cotton crop—but not so much as a lot of traders had hoped.

This week's crop report puts the probable harvest at 9,945,000 bales. That's nearly 100,000 bales more than was expected a month earlier.

However, it was half a million bales less than some trade guesses. That touched off a new brisk rally in prices.

This year's yield per acre is 259 lb., against a 10-year average of 261 lb.

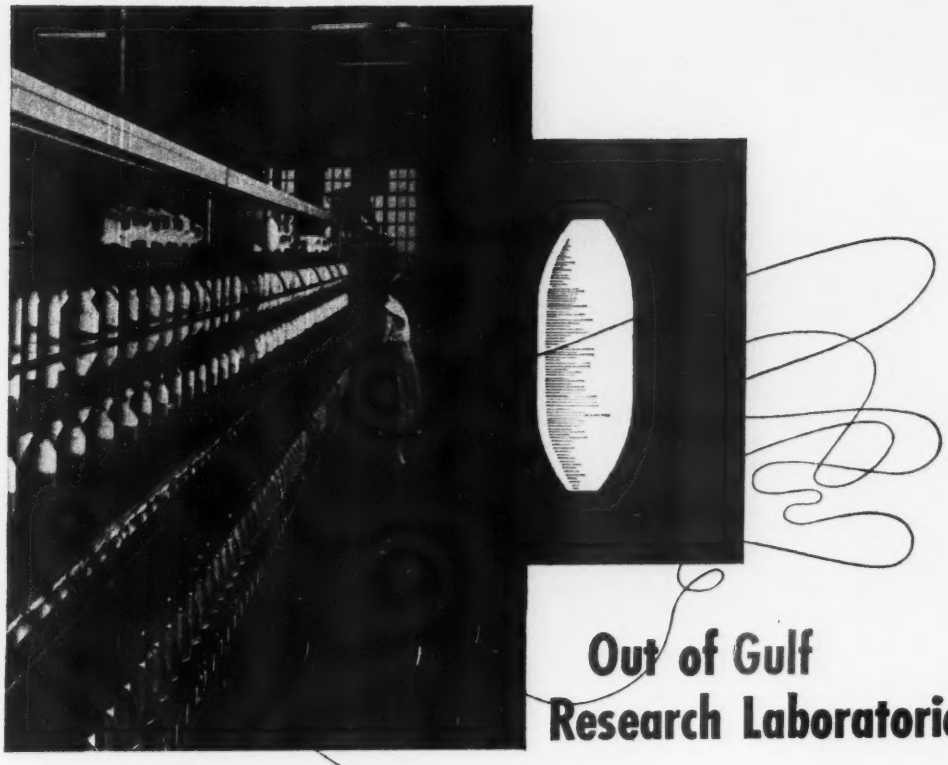
•

Some signs that the business curve is reaching that "temporary plateau" are reported from the Chicago area.

The monthly report of the Purchasing Agents Assn. shows that, for the first time in three months, there is an increase in the percentage of members with lower production, lower backlogs, fewer employees.

On business conditions, 41% said better, 49% unchanged, 10% worse. That's the fewest saying better, the most saying the same or worse, since May.

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Out of Gulf Research Laboratories –

a new spindle oil that reduces textile mill maintenance and power costs

Now available—Gulfspin, a new spindle oil that actually keeps textile spindles clean! Here's how it works to cut maintenance costs in the spinning room. Gulfspin not only resists the formation of harmful sludge but has the ability to prevent gum or varnish from depositing on spindle blades and bolsters.

To textile men this means cash in the pocket, because costly cleaning of spindle parts can be eliminated—parts wipe clean, with no evidence of harmful deposits. Freedom from spindle deposits also means elimination of such troubles as spindle hunting, lagging, and vibration. This adds up to reduced end breakage, greater production.

Textile mills also make a substantial savings in power consumption and costs with Gulfspin. Unlike conventional oils, Gulfspin does not increase in viscosity even after extended use, thus fluid friction and turning torque do not increase.

Gulfspin is one of more than 400 quality oils and greases that are helping industry improve production and reduce costs. For effective assistance on every application of petroleum products in your plant, call in a Gulf Lubrication Engineer. Write, wire, or phone your nearest Gulf office.

Gulf Oil Corporation · Gulf Refining Company

GULF BUILDING, PITTSBURGH, PA.

Sales Offices - Warehouses

Located in principal cities and towns throughout Gulf's marketing territory

GULF INDUSTRIAL LUBRICATION

Helps make machines produce more at lower cost

Guard Against Atmospheric Hazards...

WITH

Century PROTECTED MOTORS



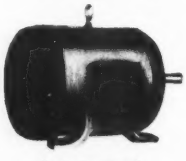
Drip Proof



Splash Proof



Totally Enclosed Fan Cooled



Explosion Proof

ALTERNATING CURRENT MOTORS

POLYPHASE

Squirrel Cage Induction—1/6 to 400 H.P.
Wound Rotor Motors—1 to 400 H.P.
Synchronous Motors—20 to 150 H.P.

SINGLE PHASE

Split Phase Induction—1/6, 1/4, 1/3 H.P.
Capacitor—1/6 to 20 H.P.
Repulsion Start, Brush Lifting, Induction—1/2 to 20 H.P.

DIRECT CURRENT MOTORS

1/6 to 300 H.P.

GENERATORS

AC, .63 to 250 KVA
DC, .75 to 200 KW

GEAR MOTORS

1/8 to 1-1/2 H.P.

MOTOR GENERATOR SETS

AC to DC, AC to AC
DC to DC, DC to AC

Open Protected, Splash Proof, Totally Enclosed Fan Cooled, Explosion Proof

Ball Bearing motors are factory lubricated for several years' normal service. Bearing housing construction permits easy re-lubrication when unusual service demands it.

CE-873

To guard your production against the destructive effects of atmospheric hazards, Century offers four types of protective motor frames.

DRIP PROOF—meets the requirements of most installations. Use it where operating conditions are relatively clean and dry. Top half of the frame is enclosed to keep out falling solids and dripping liquids.

SPLASH PROOF—keeps splashing liquids out of the motor even when the frame is washed with the full force of a hose. Use Century Splash Proof motors indoors or outdoors.

TOTALLY ENCLOSED FAN COOLED—resists the hazards of abnormal concentrations of dusts, powders, grit, oil mists, acid and alkali fumes.

EXPLOSION PROOF—protects life and property in atmospheres charged with explosive dusts or vapors.

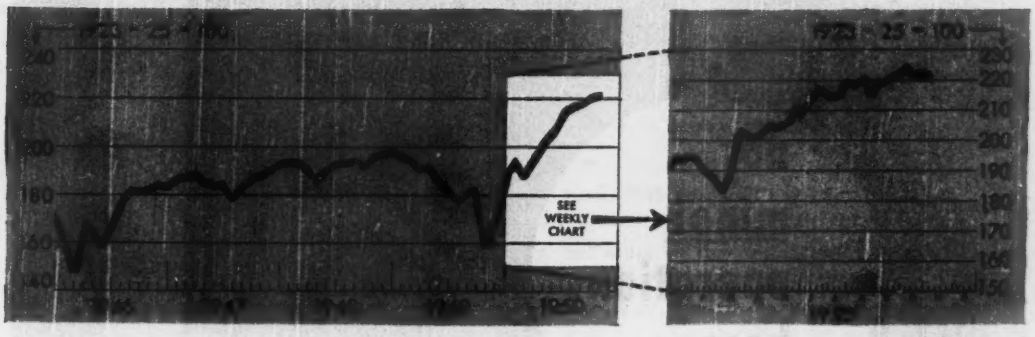
The properly selected protection with the wide variation of starting torque characteristics to choose from provides long operating life and improves the production of the driven equipment.

Century motors are available in a wide range of kinds and types—in sizes from 1/6 to 400 horsepower—for single phase, polyphase and direct current applications.

Specify Century motors for all your electric power requirements.

CENTURY ELECTRIC CO. 1806 Pine St. • St. Louis 3, Mo.
Offices and Stock Points in Principal Cities

FIGURES OF THE WEEK



	§ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Business Week Index (above)	*222.1	†223.8	222.6	158.1	162.2
PRODUCTION					
Steel ingot operations (% of capacity)	103.0	102.4	101.6	21.0	97.3
Production of automobiles and trucks	175,707	†188,200	177,853	116,699	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	$35,108	$35,928	$38,683	$23,418	$19,433
Electric power output (million kilowatt-hours)	6,551	6,563	6,514	5,435	3,130
Crude oil and condensate (daily average, 1,000 bbls.)	N.A.	5,895	5,872	5,136	3,842
Bituminous coal (daily average, 1,000 tons)	1,934	1,958	1,916	451	1,685
TRADE					
Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars)	85	86	84	68	86
All other carloadings (daily average, 1,000 cars)	63	63	63	30	52
Money in circulation (millions)	$27,219	$27,121	$27,188	$27,382	$9,613
Department store sales (change from same week of preceding year)	+5%	+3%	+6%	-7%	+17%
Business failures (Dun & Bradstreet, number)	181	160	154	196	228
PRICES (Average for the week)					
Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100), Sept. . . 173.8	....	....	173.0	169.6	105.2
Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	475.9	469.9	464.0	343.9	198.1
Industrial raw materials, daily index (U. S. BLS, Aug., 1939 = 100)	329.9	†322.1	315.5	227.9	138.5
Domestic farm products, daily index (U. S. BLS, Aug., 1939 = 100)	352.2	348.7	344.6	292.3	146.6
Finished steel composite (Iron Age, lb.)	3.837¢	3.837¢	3.837¢	3.705¢	2.396¢
Scrap steel composite (Iron Age, ton)	$41.67	$40.67	$40.67	$28.92	$19.48
Copper (electrolytic, Connecticut Valley, lb.)	24.500¢	24.500¢	24.200¢	18.500¢	12.022¢
Wheat (No. 2, hard winter, Kansas City, bu.)	$2.22	$2.20	$2.20	$2.18	$0.99
Sugar, daily price (raw, delivered New York, lb.)	6.20¢	6.20¢	6.25¢	5.99¢	3.38¢
Cotton, daily price (middling, ten designated markets, lb.)	40.34¢	40.32¢	40.37¢	29.90¢	13.94¢
Wool tops (Boston, lb.)	$3.15	$3.10	$3.10	$1.89	$1.41
Rubber, daily price (ribbed smoked sheets, New York, lb.)	71.50¢	66.10¢	60.40¢	16.58¢	22.16¢
FINANCE					
90 stocks, price index (Standard & Poor's Corp.)	156.1	156.0	158.6	128.7	78.0
Medium grade corporate bond yield (Baa issues, Moody's)	3.23%	3.23%	3.22%	3.36%	4.33%
High grade corporate bond yield (Aaa issues, Moody's)	2.67%	2.68%	2.66%	2.61%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	1½–1¾%	1½–1¾%	1½–1¾%	1½–1¾%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	1¾–1⅞%	1¾–1⅞%	1¾–1⅞%	1¾%	½–¾%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	49,485	49,891	48,985	46,848	††27,777
Total loans and investments, reporting member banks	69,248	69,230	68,674	66,666	††32,309
Commercial and agricultural loans, reporting member banks	16,523	16,322	15,915	13,694	††6,963
Securities loans, reporting member banks	2,083	2,136	2,089	2,214	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	33,559	33,729	33,694	37,388	††15,999
Other securities held, reporting member banks	6,306	6,363	6,391	4,953	††4,303
Excess reserves, all member banks	760	740	760	1,118	5,290
Total federal reserve credit outstanding	19,860	19,753	19,972	18,416	2,265

*Preliminary, week ended Nov. 4.
††Estimate (BW—Jul.12'47,p16).
†Revised.
§Date for "Latest Week" on each series on request. N.A. Not available at press time.



IN the complex structures of modern refineries and chemical plants, the pipelines, with valves at thousands of control points, may be compared to the intricate and vitally important circulating system of the human body.

When a valve fails, its removal and replacement is no *minor* operation. This critical "surgery" often requires shutdown of entire cycles of processing. Subsequent reactivation takes considerable time and often involves product waste. The loss incurred is far greater than the cost of the valve alone.

For this reason, planning and operating engineers know that the only safe economy is to install the best valves money can buy. Their choice, so often, of Jenkins Valves is based on long experience. They have learned that Jenkins' uncompromising insistence on faultless design and construction gives them an extra measure of durability, safety, and efficiency.

Despite this extra value, *you pay no more* for Jenkins Valves. Let the Jenkins Diamond be your guide to valve economy, for all new installations, for all replacements. Jenkins Bros., 100 Park Ave., New York 17; Jenkins Bros., Ltd., Montreal.

Sold through leading Industrial Distributors everywhere

JENKINS
VALVES

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WASHINGTON OUTLOOK

WASHINGTON BUREAU NOV. 11, 1950

SERVICE

Take a look at the newly elected Congress, which meets in January.

Republican gains foreshadow no quick swing back to "normalcy." The threat of war and the needs of defense slam the door on that.

But Truman's leadership is challenged on domestic and foreign issues. So you can anticipate policy shifts, some voluntary, others forced.

•

Defense still will be pushed hard. But now military men will have more say than White House budget-makers on what's needed for security.

Economic controls will stay, but must be tied tightly with defense. Congress won't permit the controllers to experiment with the economy.

Foreign policy will be toughened—less concern for Red toes abroad, more insistence on a bigger effort from our allies in return for aid.

The Fair Deal is stymied. Roosevelt-Truman laws won't be repealed, but any new social-economic reform proposals will find Congress cold.

Labor's influence will be less. The poor showing by union politicians shortens the club they have been waving over congressmen's heads.

Communists here at home can expect to find the going mighty tough. Truman's "red herring" attitude won't go down with his party now.

•

It adds up to a conservative swing, after the 1948 "liberal upsurge." The Republican gains are too big to dismiss as merely normal for an off year. They will be a brake on the leftward drift, though they may not stop it cold.

It will take another election—in 1952—to tell whether voters have had enough of the Fair Deal, or are merely upset by such things as Communists in government, war threats, controls, and inflation.

•

Truman will be weak in the new Congress. He hasn't had tight control the past two years, when Democrats held big House and Senate majorities. Now he's little better off than when the Republicans were in.

In the House, the Democratic margin of 90 has been whittled down nearly two-thirds. That isn't enough for control when a party is split.

In the Senate, the division is much closer. Before the elections, the Democrats had the Republicans 54 to 42. Now it's only 49 to 47.

A conservative Democrat-Republican coalition will take charge. It's an informal tie-up, and will stay that way. But it has shaped policy in Congress for the past two years, forcing Truman to compromise here and there in order to get parts of his program through. Now it is stronger than ever.

•

The special session this fall won't get far. Discount talk that the old Congress will jam through hot Truman issues before the new Republicans are seated in January. A filibuster could and would stop that.

More money for defense will be asked by Truman and will be voted.

Rent control may get a 60-day extension to allow reconsideration of the whole subject.

Any excess-profits tax moves will likely have to wait for the regular January session. The Administration plans a single tax package for cor-

WASHINGTON BUREAU NOV. 11, 1950

porations—EPT plus higher regular rates. But that is going to take time in Congress.

•

The January session will get off to a slow start. Every new Congress (this will be the 82nd) must begin afresh—elect officers, make new committee assignments, etc. This takes at least a month—often longer when there has been a big turnover. So it will be February before Congress really gets down to work on legislation.

A reapportionment of committees will be demanded by the Republicans to give them more seats. They will make their fight strong. For they want a bigger voice in the actual preparation of legislation.

For example: The present division of the tax-writing House Ways & Means Committee is 15 Democrats to 10 Republicans. A new division of seats might be 14 to 11, or even 13 to 12. Similar shifts would be made on all the big committees—Appropriations, Labor, Banking & Currency.

But the Democrats may balk. Reapportionment would make it harder for them to control legislation while it's in the drafting stage.

A leadership fight among Senate Democrats may further confuse things. Anti-Truman Southerners can take over Senate control—if they want to do it. But this would mean responsibility for managing Truman's legislation—either putting it through, or junking it. So the Southerners may hold off, figuring it's better strategy to use their power from the sidelines.

O'Mahoney of Wyoming or Hill of Alabama is mentioned for the leadership post. Both are Fair Dealers. But neither is for Truman on civil rights.

•

Looking ahead to 1952, Truman is still No. 1 on the Democratic side. True, he has suffered some loss of face. And the Southerners are as dissident as ever. But there's no challenger, and it's assumed Truman is a candidate.

The Truman strategy, barring a bigger war, will be the same as last time: Keep offering programs, then denounce Congress if it balks.

The Republican hopefuls are many, all cheered by the gains in Congress, state houses, and court houses. This week's victories will bring enthusiasm for the organizing job for '52 and, incidentally, make campaign money easier to get.

Taft, Dewey, Duff, Warren showed they are still vote-getters, which means they have to be reckoned with when the presidential year rolls around. Then, of course, there's Eisenhower. His backers think that he could whip the field if he should decide to get into the race. Who will get the nod may depend largely on whether the next two years bring war or peace.

•

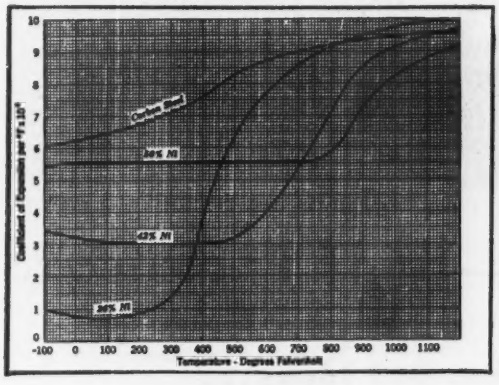
Washington doesn't know Red China's plans. But it is plainly worried. The effort now is to make concessions that will keep China out of Korea. If that fails, the least to expect is a long fight against Red "volunteers," with the risk of a big war (page 131).

Iron-Nickel Alloys Maintain Operating Accuracy

BY CONTROLLING THERMAL EXPANSION

Any desired coefficient of expansion, ranging from almost zero to a value greater than that of ordinary steel, may be obtained with the iron-nickel alloys. In addition, these alloys are strong, tough, ductile and possess a useful degree of corrosion resistance.

In wide use is a 36% nickel alloy... aptly named "Invar" because its dimensions remain almost *invariable* over the range of atmospheric temperature variations. However, as nickel content goes higher, expansion increases continuously. The chart, below, shows the thermal expansion characteristics of Invar and two other high nickel alloys, along with those of carbon steel for comparison.



FABRICATION

Like all austenitic alloys, those of the iron-nickel system respond well to plastic deformation, either hot or cold. They may be welded by any of the commonly used methods, and users report their machining characteristics are very similar to those of other high nickel alloys such as Monel® and Inconel®. A special, free-cutting grade is available to meet exacting machining requirements.

APPLICATIONS

Where dimensional changes with temperature must be minimized, or where such changes must approximate those of other materials of relatively low expansivity, iron-nickel alloys... sometimes modified by other alloying elements... are almost universally used.

For example... in thermostatic bimetal strip, Invar serves as the low expansion side for use up to moderately elevated temperatures. At higher temperatures, the 42% nickel alloy is commonly used. For the high expansion side, special alloys, containing 15-25% nickel, are used extensively because they develop nearly double the expansivity of iron. Iron-nickel alloys are also widely used in glass-to-metal seals, where expansivity of the glass must be closely matched. The 42% nickel alloy, sometimes with added chromium, is used with soft glasses. Hard glasses call for nickel alloys containing added cobalt.

Scores of other iron-nickel alloy applications include bases for giant telescopes, surveyors' tapes, radio condensers, parts for textile machinery and for numerous precision instruments and devices.

Industrial fields of usefulness for the iron-nickel alloys are far from exhausted. These unique materials can be of incalculable value in improving instrumentation and process control, and in the design of new devices. They are available in various forms including wire, rod, strip, sheet, bars and tubing. Send coupon today for additional information on the properties of iron-nickel alloys... they may be the means of improving your products, equipment, or process.

SYMBOL OF INCO SERVICE — TRADE MARK

The International Nickel Company, Inc.
Dept. BW, 67 Wall St., New York 5, N.Y.

Please send me further information about Iron-Nickel Alloys.

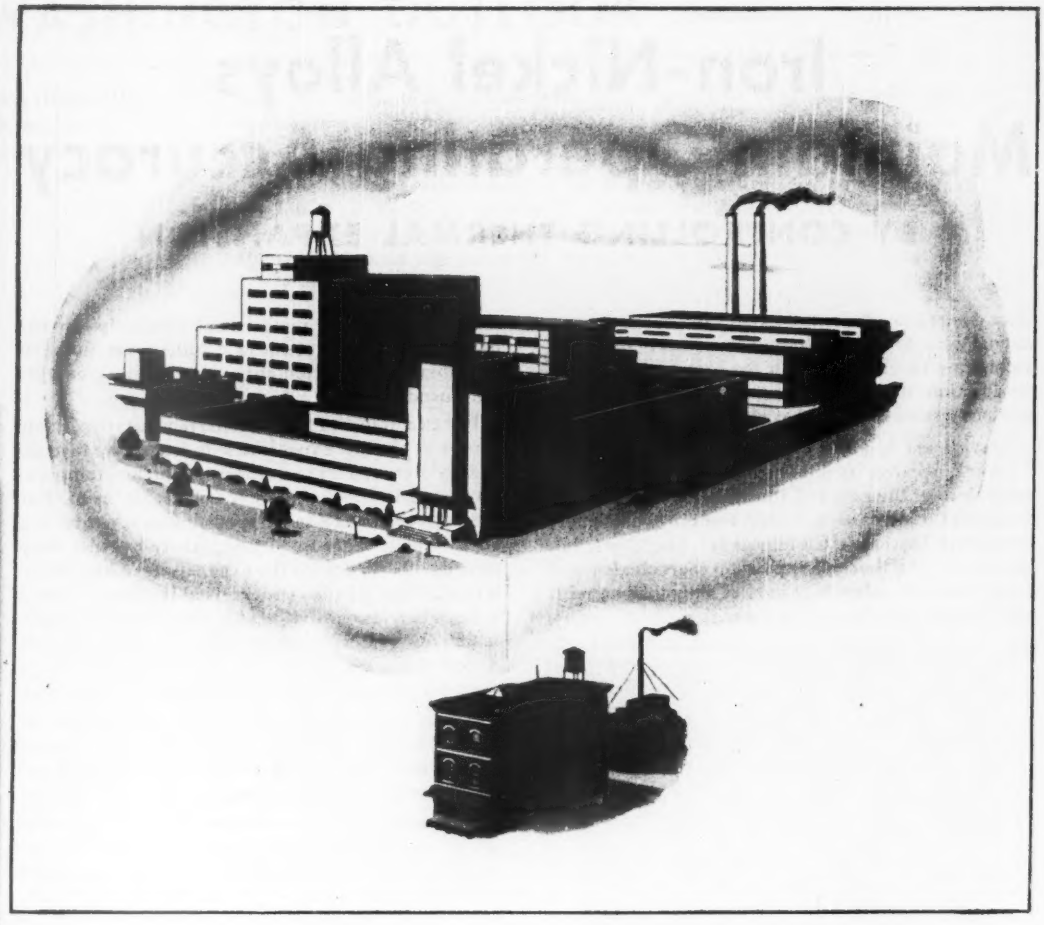
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*Company*_____

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*City*_____ *State*_____

THE INTERNATIONAL NICKEL COMPANY, INC. 67 WALL STREET NEW YORK 5, N. Y.



To a little factory with BIG ideas...

HERE in the South you can dream *big* dreams, little factory...and make them come true!

For there's no greater "opportunity land" in all America than the fast-growing Southland of today. All along the 8,000-mile Southern Railway System, new factories are springing up...established industries are expanding.

With the Southland's limitless opportunities and advantages, dreams of industrial greatness can take root and *grow!*

"Look Ahead... Look South!"

Ernest E. Norris
President

LOOK SOUTH LOOK AHEAD

SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

BUSINESS WEEK
NUMBER 1106
NOVEMBER 11, 1950

How 1951 Capital Spending Plans Have Gone Up

Figures in Millions of Dollars	1948 Spending	1949 Spending	1950 Spending Reported Last April	1950 Spending Reported Now	1951 Plans	Percent Change 1950-51
Manufacturing	$ 6,160	$ 7,200	$ 6,845	$ 7,230	$ 8,270	+20
Chemicals	1,400	1,100	1,100	1,220	1,500	+23
Petroleum	740	700	580	675	775	+15
Food	595	600	625	645	700	+ 9
Machinery	900	530	475	540	640	+19
Steel	685	520	490	500	650	+30
Autos	630	430	740	790	925	+17
Textile	445	410	390	420	460	+10
Electrical Machinery	310	200	145	130	200	+53
Transportation Equipment	135	145	100	90	170	+89
Other Manufacturing	2,320	2,575	2,200	2,300	2,750	+20
Railroads	1,345	1,310	970	1,160	1,240	+ 7
Electric & Gas Utilities	2,690	3,160	3,080	3,200	3,300	
Other Transportation and Communications	1,900	1,880	1,775	1,770	1,600	—10
Mining	765	750	680	680	795	+17
Grand Total	$14,360	$14,500	$13,360	$14,120	$16,605	+18

BUSINESS WEEK SURVEY shows industry expanding more this year than it expected to, planning a further boost in 1951. It's . . .

Expansion's Third—and Biggest—Wave

Plans for new plant and equipment dwarf war and postwar programs. Spending next year will break all records.

There's never been anything like it. In September, Los Angeles firms spent $18-million on new plant and new machinery—more than three times what they had spent in the two preceding months combined.

For three months, through July, August, and September, the town halls of suburban Detroit, where the auto industry does its expanding, staggered under a flood of applications for industrial building permits—35 times as much construction as in the preceding three months.

The Cleveland area, during World War II, was a center of war production. All through the war, plant after plant sprang up in Cuyahoga and Lake counties—a total of 8.6-million sq. ft. of floor space. Today, Clevelanders can point out 8.5-million sq. ft. of industrial work space abuilding, scheduled, or being pulled out of mothballs.

Across the country, within the space of a few months, industry has visibly launched itself on the biggest wave of industrial expansion ever. And the amazing thing about it is that this new wave comes right on top of two previous waves—each in its turn the biggest the country had ever seen.

• **Wave No. 1**—U. S. industry went into World War II with a shabby, run-down production plant. Most companies were still getting along on whatever buildings and machines they had when the bottom fell out of things 10 years earlier. You couldn't fight a war on that basis. So the government went to work. It gave tax concessions, loaned money, went out and built plants itself. It seemed in those days as if a factory were sprouting in every cornfield. By the time the shooting was over, the country's productive plant had been increased something like 20%.

Many a capital-goods producer feared that he was crowding into four years the business that should have kept him going for a postwar decade, that the shiny new windowless plants would turn out to be fine places for growing mushrooms.

• **Wave No. 2**—It didn't work out that way. Some of the war plants were useless for civilian goods; some were located in the wrong places. But the big thing was that consumers had an insatiable appetite for goods and pockets chock-a-block with wartime savings. Presented with this sort of demand, industry began spending its own money for plant at a rate that dwarfed the government's wartime effort. Company

Capital spending includes a lot of things besides new



PIPE Petroleum, natural gas gobble up miles of it. Pipe supply is tight.



TRUCKS Shippers, bakers, stores —all want better fleets.

after company laid out ambitious three-year and four-year programs of expansion for itself—programs for new rolling mills, for grocery warehouses, for pipelines. Year by year the spending mounted, through 1946, through 1947, through 1948 (chart, page 22). 1948 was the peak. That year business spent nearly $15-billion on strictly industrial facilities (table, page 19). Add in stores, theaters, and other commercial equipment—as the government does in its figures (chart, page 22)—and the total reaches $19-billion.

By 1949, many of the postwar expansion programs were winding up. One company after another finished its new plants, quit expanding, began beefing up its sales force to keep its big output moving to the customers. Industrial expansion fell off from $15-billion to $14.3-billion.

Late last year the McGraw-Hill Economics Dept. made its annual survey of industrial budgets for the coming year. It showed clearly that the postwar wave had passed. Nearly every concern sampled planned to cut back its expenditures in 1950; total spending was going to drop steeply to only $12.4-billion. The boom was over, on schedule.

I. The Great Surprise

But last spring this orderly and reasonable progression suddenly took a fantastic turn. Businessmen found an unbelievable suspicion forced upon them: Even in the heady exuberance of the postwar years they had managed to underestimate the U. S. appetite for goods. Maybe the sales managers and the boards of directors had forgotten how fast the population was growing. Maybe they hadn't allowed sufficiently for the extent to which their very efforts to increase productive capacity put more money in people's pockets, thus created more demand. Whatever the reason, there still wasn't enough capacity.

• **Choke Point**—Looking back, you can see that it was the steel strike a year ago that brought the turn. It didn't look too important at the time. Steel consumption had been slacking off a bit anyway; it seemed as if a month or two of capacity operation would make up any strike losses.

On paper, yes. But it took only that much of a choke point in the flow of production to reveal how precarious, actually, was the apparently smooth balance between supply and demand. Queer local shortages developed—refrigerators, for instance; merchants who had been keeping a firm clamp on inventories began ordering desperately; manufacturers found the backlogs on their order books lengthening by the day.

Everywhere, smart businessmen suddenly realized there were big markets still to be had—if they could just increase production still further.

In April, the McGraw-Hill Economics Dept. and BUSINESS WEEK rechecked the survey of industrial spending plans. It turned out that businessmen had been revising their budgets, enlarging their plans. As a whole, they now expected to spend some $13.2-billion—halfway back toward the 1949 level.

• **Explosion**—The survey returns gave clear hints that the trend was still up, that actual expenditures in 1950 would probably top this $13.2-billion figure. There is no telling now how far this



FREIGHT CARS The roads want 120,000 to ease their vast load.



OFFICES A war economy means more paperwork, big demand for office machines.

bricks and mortar—here are a few of them:



MACHINERY Industry thinks purchases will be up 19% next year.



SHIPS Faster, longer ore carriers are needed to speed steelmaking.

movement would have gone, for . . .

Then came Korea.

That took the lid off. It was obvious that some degree of industrial mobilization was ahead. Consumers went hog wild, depleted store shelves; businessmen who had been delaying purchase of a machine or a building decided they'd never have a better chance; other businessmen who had had doubts about the persistence of consumer demand concluded that a substantial armament program would guarantee purchasing power high enough to justify further investment. Capital spending billowed.

• **Figures**—This week adding machines in the McGraw-Hill Economics Dept. slammed out the results of another recheck on capital spending. The findings are conclusive:

Since April, business spending has risen faster than ever before. By now it's running at a higher rate than in the peak year of 1948. And businessmen have every intention of continuing this same rate of expenditure right through 1951. So the total expenditure in 1950, despite a low start, will come within a $100-million or so of 1949. And spending in 1951 will total at least $15.6-billion, about 5% higher than 1948 itself.

These results are startling. How good are they? Past experience with such surveys indicates that it is an accurate measure of businessmen's intentions.

The big question, then, is whether businessmen next year will spend as much as they now intend to. Or will they spend less? Or more?

That's nothing to be dogmatic about. But the weight of the evidence is that—unless material shortages prevent them—businessmen will spend more next year than they now think they will. That conclusion emerges from analysis of what's behind this third wave of expansion.

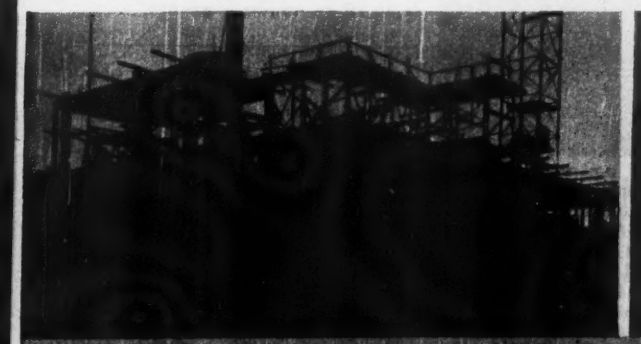
II. Pushing the Wave

Today you can identify three forces pushing toward expansion of industrial capacity, though one of them is much more important so far than the other two.

• **Strong Force**—The overwhelming proportion of the capital spending now under way, and a great majority of the spending now planned for next year, is motivated by a straightforward expectation of better business—civilian business. Here and there you'll find a war plant. In Cleveland, for instance, Cadillac is moving machinery for a huge tank arsenal into a wartime bomber plant. But right in the same city is an even bigger, and strictly civilian, project—Ford's $60-million foundry and auto-engine plant (cover).

Right after Korea there was a terrific burst of plant expansion around Detroit. But that wasn't because the auto companies expected to be making airplanes and machine guns; Korea merely convinced them that they had better get going while they still could on their long-term plans: The auto industry is convinced it is too small; there are more families than ever in this country, and a larger proportion of them can afford cars. Detroit still isn't equipped to meet the need.

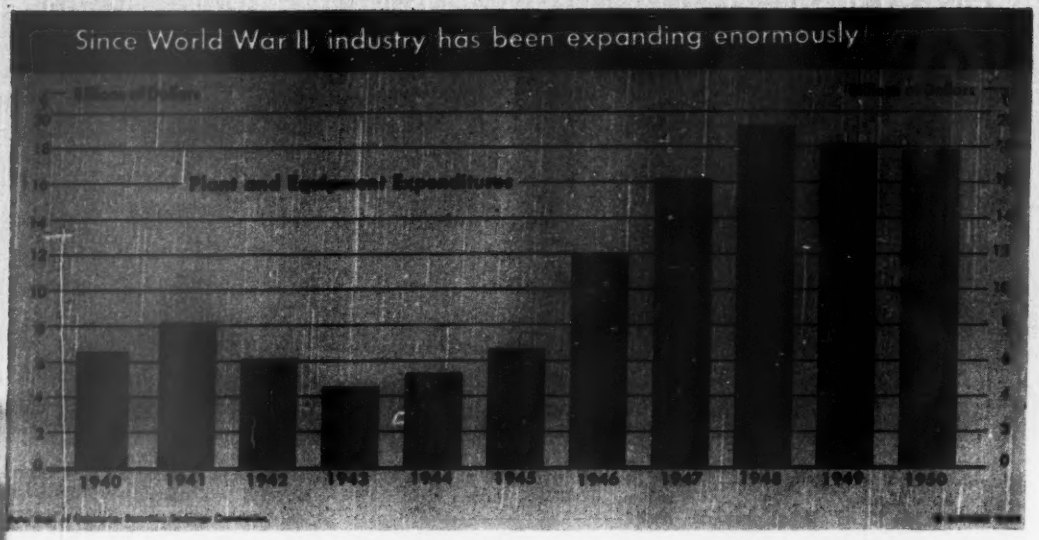
• **Example**—Typical is the way Gardner Board & Carton Co. explains its decision to build a $1.5-million box plant at Lockland, Ohio: "Mobilization has nothing to do with it. For 10 years we've been getting more and more



RENOVATION Quick way to more space: improve what you've got.



PLANES Higher speeds and payloads will trim the airlines' costs.



GOVERNMENT FIGURES (which include commercial work, aren't comparable with BW's) show the postwar wave that followed the wartime government-financed expansion. It peaked off in 1948.

orders. We have a progressive organization; we went out and nailed the business. The increase in self-service stores means that cartons have to do more of a selling job . . . display. Many things that were in glass or tin now are turning up in paper, beer for instance. It's a transition in American buying habits. We are working three shifts in most departments, and we have to have more capacity."

You can see another sort of transition on the West Coast, where Lockheed Aircraft is getting rolling on a $5-million expansion. Military as it sounds, this is a pre-Korea program. Jet aircraft of sonic speed have to be extra sturdy; that changes the whole technology of building airframes. So Lockheed is putting its money into heavy machinery that can handle stainless steel and half-inch-thick aluminum plates.

Everywhere you find an emphasis on machinery and equipment rather than on brick and mortar. This, too, underlines the essentially civilian character of the present expansion.

• **Foreshadowing**—Of course, there's a mobilization aspect to most civilian programs today. You do find curious clots of skepticism and caution—among Columbus businessmen, for instance, or in Denver; but most industrialists expect that military mobilization and stockpiling, even though it doesn't hit them directly, will guarantee them a market for years ahead.

• **Potential Force**—All this points to one major conclusion: The second force driving toward industrial expansion—direct military needs—has still to do its work. Present capital-spending plans don't allow for any major volume of munitions production. Half the producers queried by the McGraw-Hill Economics Dept. say they will have to expand still more if they get substantial defense orders; even more significant, two-thirds of the producers in the industries where most munitions work goes say they would have to expand.

Next year, as munitions production gathers momentum, businessmen are likely to have to revise upward even their present ambitious plans.

III. For the Long Haul

Over the years ahead, there's still a third force driving industrial expansion upward, a force that has hardly even begun to work. That's the federal government.

Short of all-out war, the Administration can see only one workable way to counter the long-term Russian threat. That's to expand industrial capacity so rapidly over the next four or five years that the country can support both a major military force and a high standard of living—garrison state plus welfare state, guns plus butter.

This drive had its first concrete effect last week when General Services Administration started working out a deal with aluminum producers: If they would build plants to produce another 1-billion lb. of metal, GSA would agree to buy the entire output for five years—and the companies could amortize the plants during the same five years.

• **Pressures**—From now on, you'll see more of this—guaranteed markets, tax concessions, loans, diversion of materials from consumer goods to capital goods, threats at least of direct government expenditure. Aluminum will feel it still more (the government wants another 1-billion lb. on top of the present 1-billion addition); steel will feel it (government wants twice the presently planned expansion); power will feel it; and so will petroleum, nonferrous metals, shipbuilding, freight cars, and machine tools.

Chairman Keyserling of the Council of Economic Advisers speaks for most of the Administration when he argues: On the economy's normal 3%-a-year expansion we just can't afford to mobilize. He thinks we need something like 9% a year.

The plant expansion that industry is now figuring on for next year would increase the country's industrial capacity—as near as you can figure such things—by some 4% or 5%. This won't be enough to satisfy the Administration—or to satisfy many businessmen.

REPRINTS AVAILABLE

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Big Steel Streamlines Itself

Four major subsidiaries will be lumped into one operating company on Jan. 1. Management shifts revive talk that C. F. Hood may become president if Fairless moves on up.

The huge and complicated U.S. Steel Corp. is giving its corporate structure a major overhaul—the first in 13 years. On Jan. 1, 1951, Big Steel will lump four of its most important wholly owned subsidiaries into a single operating company.

The new company will be called U.S. Steel Co. It will swallow up Carnegie-Illinois Steel Corp., H. C. Frick Coke Co., U.S. Coke & Coal Co., and U.S. Steel Corp. of Delaware. Big Steel says the purpose of the consolidation is "simplification of the corporate structure." Steel men take this to mean that the corporation wants to tighten up the central controls on its widespread operations. There probably will be some savings in administrative costs and taxes, too.

• **Next President?**—Benjamin F. Fairless, president of the corporation, will also be president of the new company and chairman of its executive board. Clifford F. Hood, now president of Carnegie-Illinois, will be vice-chairman. This setup revives the talk, current a year ago, that Hood is being groomed to replace Fairless as president of Big Steel itself. That talk began when Hood took over at C-I.

Fairless, who has just turned 60, is not expected to resign any time soon. But it's possible that he might be moved up to the board chairmanship. Irving S. Olds, the present chairman, will reach retirement age in a little over a year.

• **Tightening Up**—Formation of the new company will bring a large part of Big Steel's operations under the hands of a single management group. Carnegie-Illinois is the world's largest steel producer. Frick and U.S. Coke & Coal are the principal suppliers of coal for the steel empire. U.S. Steel of Delaware is a management advisory group that has steered the course of Big Steel subsidiaries in raw materials and steel producing and fabricating.

• **Other Subsidiaries**—These four are the only U.S. Steel subsidiaries affected by the reshuffle. Other companies, like Columbia Steel and American Bridge, will continue to operate on their own. But the policy guidance formerly supplied by U.S. Steel of Delaware will now come from the new U.S. Steel Co.

In the Big Steel corporate hierarchy, U.S. Steel Co. will come directly under the holding company, U.S. Steel Corp. Thus the new entity's relative position will be somewhat similar to that of Bethlehem Steel Co., which is under Bethlehem Steel Corp., a nonoperating holding company.

• **New Office**—The executive complement of U.S. Steel Co. is just as important as the whopping size and rank of the company itself. President Fairless will be flanked by five executive vice-presidents. This is something new in Big Steel, which has always had presidents aplenty, and as many as 100 vice-presidents—but no executive vice-presidents.

Hood will be executive vice-president in charge of operations. The remaining executive vice-presidents are: David F. Austin, handling the commercial end; Roger M. Blough, law and secretarial; Malcolm W. Reed, engineering; and George W. Rooney, accounting. Reed and Rooney will have the same responsibilities they formerly held in the Delaware corporation.

• **Still Top**—Fairless will continue as Big Steel's key man under the new setup. He was brought into the organization in 1935 by Myron C. Taylor, the Big Steel board chairman and still a member of the Board. Three years later, he became president of Big Steel as part of a triumvirate that included Edward R. Stettinius as board chairman, and E. M. Voorhees as chairman of the finance committee. The structure that was then established has survived with little change until the present major reorganization.

Rails Debate Rate Hike

Higher rail freight rates are in the wind again. Chief traffic officers of the nation's railroads met in Chicago last week to discuss possible increases.

Eastern roads are powering the drive for rate boosts of 5% to 6%; western and southeastern roads are gently applying the brakes. The eastern roads feel that they need more revenue—and soon. But western and southeastern roads fear that higher rates now might actually result in lower revenues by driving traffic to the truckers.

In spite of the conflict, talk progressed to the "how and when" stage. Should a rate hike come before or after pending wage negotiations are over? Should it be across the board, or should specific commodities be picked for an increase?



A Smile Worth $91-Million

A smile, a handshake, and a check last week brought Kaiser Steel out of debt to RFC. At the Chase National Bank in New York, Henry Kaiser (left) handed over $91,476,989.92 to C. Edward Rowe, vice-chairman of RFC. The money was the last of $123-million that Kaiser borrowed to build his Fontana (Calif.) steel plant during World War II. To redeem the loan, Kaiser Steel sold $60-million in mortgage bonds and $40-million in stock—its first public offering (BW—Sep.16'50,p104).



NSRB's W. Stuart Symington has altered his role from umpire to signal-caller.

Mobilization Quarterback

Unobtrusively, Symington has taken over the leadership of mobilization planning. He's largely responsible for all the controls so far. He'll call tough plays from now on.

Industrial mobilization has become virtually a one-man show in Washington, and it will be a tough show because of the man who's running it. W. Stuart Symington thinks civilian belts must be tightened—at least temporarily—to meet satisfactorily the military demands of the hour.

• **Quick Switch**—It took Symington a little over two months to switch from his initial role of peacemaker for feuding mobilizers to quarterback for the government controls team. But it's now clear that he's calling the signals, as well as settling the squabbles.

It was an odds-on bet among bureaucrats when the Defense Production Act became law that Symington and his National Security Resources Board would get the whole mobilization job. Both Symington and NSRB looked as if they were ready to take it on. So there was much surprise when Truman gave the real controls job to old-line agencies such as Commerce Dept., Interior, and others. To Symington and NSRB went the seemingly unspectacular task of "coordinating" the programs of the various controls agencies.

And for a time Symington simply coordinated. But somewhere along the line he made up his mind that things were not moving quickly enough. So he took on the job of prodding his fellow mobilizers to action.

• **Construction Ban**—It was Symington, for example, who precipitated National Production Authority's ban on nonessential construction. Labor complained to NSRB that credit restrictions were biting into housing wanted by workers while construction of bowling alleys and movies houses still boomed. Do something about it, Symington told NPA. NPA did, although in the process it got into more trouble with the construction industry than it had bargained for (page 106).

• **Aluminum Expansion**—It was Symington again who stepped in to take over the government push for expansion of aluminum production. This followed Commerce Secretary Sawyer's drive for more steel. The Munitions Board started a similar search for more aluminum. Then Symington told the aluminum producers to bring their reports to NSRB instead of the Munitions Board. Since then, he has told the industry to take on a 1-billion-lb. expansion program as a start.

When other mobilizers hesitated, Symington simply took over the five-year amortization and direct government loan programs himself. NSRB will have the last say on applications for both.

• **Price and Wage Controls**—It's Symington, too, who is calling the turn on price and wage controls. These will be administered by his old friend, Economic Stabilization Administrator Valentine. We'll try other controls first—credit restrictions and some industrial controls on the flow of material and equipment. But, Symington warns, we'll have actual price-wage ceilings if these don't work.

Symington talks especially tough about price-wage controls—if and when they are needed. Price increases now being made "in anticipation of price controls," with no other justification, won't pass muster, he says. Price schedules simply will be related to "an earlier price base," in instances such as these.

• **Metal Uses**—Symington is in there again urging NPA to impose tougher controls on uses of metals and other vital materials. We have to get these nonessential producers into essential production, anyhow, Symington has told associates.

• **The Right Connections**—Since he's been talking tough, Symington has had powerful support from other members of the Truman team—he already was entrenched as a top confidante of the President. He recently set up a new over-all coordinating committee, made up of the heads or representatives of all controls agencies. In the early sessions of this group Symington has been supported strongly by Leon Keyserling, chairman of the Council of Economic Advisers.

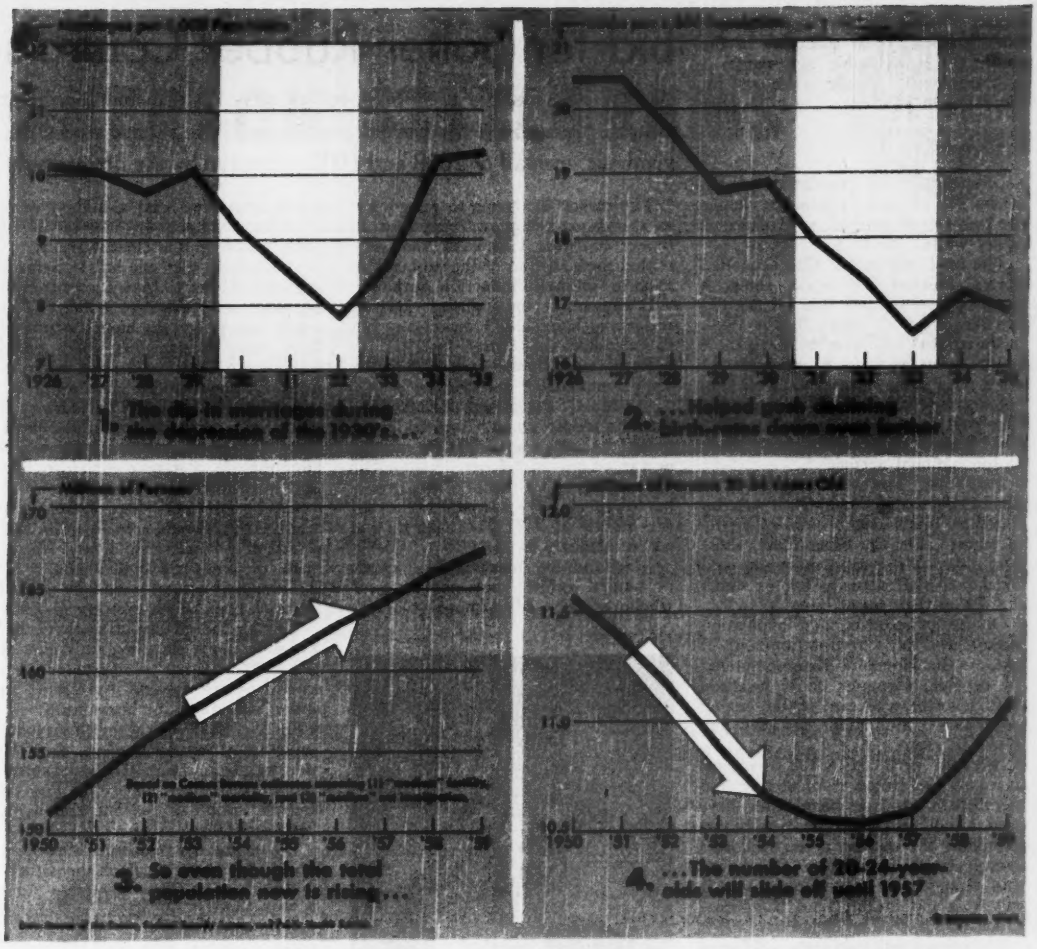
The Symington-Keyserling policy as outlined in these meetings apparently boils down to this: tough controls and all-out expansion of vital production, even if it means a temporary lowering of gross national product.

• **NSRB Left Behind**—Little of Symington's prestige as the real mobilization boss has come to NSRB or its staff. A comparative handful of agency staffers are really close to the chairman, and most of those are newcomers.

The agency is not expanding. Symington has appointed a few top-level consultants and is gathering a small staff to handle applications for government loans and accelerated amortization certificates. The rest of the staff keeps at its old job of mobilization planning—while actual mobilization goes on about it.

The staff thus divides into two groups: the few who work closely with the chairman and know what's going on; and the much larger group, including most of the old-timers, who claim they're operating virtually blind. The first group is almost fanatically loyal to Symington.

• **Mixed Feelings**—The others have mixed feelings about their chief. They all concede he is a shrewd administrator with fantastically good political connections—at the White House and in Congress. That's enough for some, but a few are looking for other jobs. They don't like the way new consultants are advising the chairman on matters which once were in their bailiwick.



Population: Uptrend With a Hollow Spot

This week, the demographers—the experts who study population trends—presented the country with a paradox. On one hand, they reported—as a result of the 1950 census—that the U. S. population has grown 19-million in 10 years to a total of 151-million. And on the other, they pointed out that most of that growth had come in the top and bottom age groups, not in the middle.

Both trends have profound economic and political consequences.

I. "Hollow Class"

The trouble with the middle—specifically, the 20- to 24-year age group—is that it got socked hard by the depression—socked right at the start.

In the late 20's the birth rate started to drop. Then came the misery of the 30's. That pushed the birth rate down to the lowest in history. And the children who weren't being born then aren't growing up now. (This results in what is technically known as a "hollow" population class.)

So during the next six years the population from 20 to 24 years of age is due for a reduction of some 10%. By 1956, there will be a million less of these youths around.

• **Significance**—Ordinarily, that might be just an academic bit of information. But now it has more than usual significance. The annual increase in the labor force comes mainly from this group. And as the need for defense workers rises rapidly, the pool from which it normally would draw is shrinking.

Industry is already at the point where short-run output is limited by the amount of raw materials that can be obtained. But the ultimate limit on production will be the number of workers that can be hired. So a drop-off in candidates for the labor force is going to hurt—bad.

Then, too, this age group is a heavy contributor to the armed forces. A slide-off in the number of the 20- to 24-year olds means that proportionately more of the older ages will have to be called up. And that has a further effect on production. The older a man is, the more skill he usually has. The younger the man in the Army, the less effect it has on production.

• **Aftermath**—The marriage rate, which has been running along at a good clip, is apt to be hit hard by the decline in the number of young people. New family formation is one of the major

outlets for the products of industry. And the year-by-year reduction in the youths of marriageable age means a correspondingly smaller market for thousands of products.

II. Over-All

Meantime, total population growth of the last 10 years is going to change the balance of political and economic power within the U.S.

The final tally in the 17th decennial census, finished last week, shows a population of 150,697,361. That's 19,028,086—or 14.5%—more than in 1940.

• **Variations**—You have to break these figures down by states to see how and where the shifts take place. Not all states gained citizens at the same rate. New York, for example, picked up 10%; New Jersey, 16.2%—both fairly close to the national average.

California, however, gained 53%, while Oregon and Washington were up almost as much—39.6% and 37%, respectively. On the other hand, there were some—Mississippi, Arkansas, and Oklahoma—that actually lost as much as 4.4% of their population.

One major result of these population changes will be a reapportionment of seats in the House of Representatives. To be sure, Congress could just add more seats to take care of the higher population. But that's not the way it will be done.

After the 1910 census, the lawmakers increased the House from 391 to 435 members. But since then, they have been handling population growth by reshuffling the number of seats allotted to each state every 10 years. One state's gain is another's loss. Here's how it will work out in the 82nd Congress—which will take office in January, 1953:

Seven states will gain seats: California is far and away the leader with a gain of seven in prospect; Florida will get two; Maryland, Michigan, Texas, Virginia, and Washington each gain one.

Nine states will lose seats: Pennsylvania will take the biggest beating—a loss of three; Missouri, New York, and Oklahoma will lose two each; Arkansas, Illinois, Kentucky, Mississippi, and Tennessee will all have to give up one.

You can be pretty sure that these shifts, and the growth in population generally, will favor the Democratic Party—and its economic philosophy.

For another thing, the population gains are concentrated in urban areas, a situation that traditionally means more Democratic votes.

Of course, Republicans can offset this trend somewhat through their control of state legislatures. Despite previous gains in urban population, rural (usually Republican) areas have managed to retain control of most state law-making bodies.

Bid for Softer Rubber Controls

Tire makers urge NPA to go easy on use limitations for natural rubber in 1951. They want to use 39% natural and 61% synthetic, instead of 20% and 80% proposed by the government.

Tire makers are trying to get government defense planners to go easy on rubber controls. Last week they submitted their analysis of the rubber situation to National Production Authority. The aim was to get industry views on the record before NPA makes any further decisions on controls for 1951.

• **Recommendations**—Tire manufacturers recommended that NPA:

• Make enough rubber available so that the industry won't have to lay off skilled workers who might be needed in a more critical defense period. The industry feels that the 16% cut in rubber usage already ordered for the last two months of 1950 is uncalled for and will force heavy layoffs.

• Build an "adequate" stockpile of natural rubber, but not an overwhelming one. It's rumored that the government is seeking a million more tons for stockpile—an investment of close to $1-billion at current prices.

• Permit the sale of U.S.-made synthetic rubber to foreign countries in exchange for natural rubber. This would benefit foreign branch plants of U.S. rubber companies; they could bring down their production costs by using the lower-priced U.S. synthetic.

• **Against 20%/80%**—The industry is particularly concerned about the possibility that mobilization planners will limit the use of natural rubber in tires next year to 20%. The other 80% would be synthetic. Tire makers contend that this would actually mean that passenger-car tires would have to be made of about 98% synthetic. All the available natural would be needed for truck tires, which take heavier duty.

Though the quality of synthetic has improved much since the early days of World War II, tire technicians say that an all-synthetic tire still won't stand up under high speeds or heavy loads.

• **For 39%/61%**—So if the government limits use of natural to 20%, then the industry feels that the government should go further down the line on controls, rationing gasoline and fixing a top speed limit.

What the tire makers really want, though, is a better break on the natural-synthetic ratio. They suggest a limit of 39% natural and 61% synthetic in tires for next year.

• **Big Secret**—Another thing that irritates tire men in their battle with the government over controls is that they have never been told how much rubber is in the national stockpile. It's a military secret, but a secret that the industry thinks some of its top men ought to be in on. It proposed recently that a committee of top rubber executives be formed, under the chairmanship of John L. Collyer, B. F. Goodrich Co. president, to be told the secret figure and to plan on the basis of it. But NPA administrator W. H. Harrison has rejected the proposal.

• **High Earnings**—Meanwhile, the rubber industry has been riding along on a wave of high earnings. In spite of continued price increases, the latest of which was announced last week, tire sales are continuing to boom. Car owners are paying about 36% more for replacement tires today than they did a year ago. But tire makers expect their sales to fall off next year—perhaps by as much as 10%.



In Keller's Shoes

Chrysler Corp. gave K. T. Keller a little more time last week for his new job as director of the Office of Guided Missiles (BW—Nov.4'50,p20). In a top-management shift, it moved Keller up to chairman of the board and put Lester L. Colbert in Keller's old spot as president. Colbert has been with Chrysler since 1933. He was boss of the huge Dodge Chicago plant during the war, has been Dodge president since. Along with the change, Chrysler had good news for stockholders: Nine-month earnings hit a record of $12.09 a share, despite last spring's long strike.

(*Advertisement*)

RYERSON STEELGRAMS

RYERSON CERTIFIED STEELS

This bulletin is written to keep you abreast of the warehouse steel situation as we see it here at the Ryerson Company. We hope you will find this summary helpful in specifying, buying and working with steel.

If you have orders with DO Priority Ratings be sure to pass ratings along to your steel supplier. This will not only expedite delivery of steel but may also help warehouses maintain inventories against your future demands. Depleted warehouse stocks of 1942 emphasize importance of working for continuous replenishment.

New loan guarantees, recently announced by the Federal Reserve are helping many small manufacturers with defense contracts. Similar to World War II V-Loan program, the new set-up provides such manufacturers with easier access to working capital.

Despite restrictions on nickel, you will still be able to obtain alloy steel of comparable performance containing other alloying elements. As warehouse stocks of nickel alloys are depleted, triple alloys, which proved their worth in World War II, will take their place. Cost — slightly less.

A word about telephone service — A tremendous number of incoming calls is taxing the capacity of our personnel and switchboards, and even of whole exchanges that serve our plants. What we are doing about it: Improved facilities are now being installed or planned for where needed. Suggested emergency measures: early calls before peak loads; telegraph; mail, which most Ryerson plants pick up hourly at P. O. for quicker service.

Improved outlook — Building for the future, the Ryerson Chicago plant is being extensively rebuilt and enlarged. In Cincinnati — a completely new Ryerson plant at new location soon to be in operation. At Philadelphia — a new mill-type slitting line gives quick service on strip steel of any width up to 48".

New machinability records for alloy steel are being set by Ryerson Rycut — a free-machining medium-carbon alloy. Shop experience shows that Rycut machines 25% to 50% faster than standard alloys of same type, annealed or heat treated.

Shortages of some products such as bars, shapes, plates and sheets are inevitable. But many others are in good supply at Ryerson. Among them:

Tubing — Good tonnage of both seamless and welded mechanical tubing is on hand and new stock is coming in regularly. So while we may be short of a few sizes one week, they may be available the next.

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I unhesitatingly recommend that you contact this Board immediately. You'll get an amazing, fact-filled answer to your question "Can It Be True?" Write (Box 927), wire, or telephone (L.D. 94).

L. W. BISHOP, *Director*
South Carolina Research, Planning and Development Board
Department BW-11, Columbia, S. C.

South Carolina
WHERE RESOURCES AND MARKETS MEET

BUSINESS BRIEFS

Paul Hoffman and the Ford Foundation (BW–Oct.7'50,p30) made it official. He will take over as president of the fund on Jan. 1. Salary: $75,000 a year.

•

Detroit's depression ghost, the half-completed Ponchartrain Club building, is coming to life. Bagley First State Corp., formed by two Clevelanders, has bought up the shell and will convert it into a deluxe apartment hotel. The building has stood unfinished since the crash of 1929.

•

A minority revolt captured control of the board of Sparks-Withington Co. (automotive and television parts, Sparton radios). Harry Sparks, son of one of the founders, is out as president, with John J. Smith replacing him. The new bloc is pledged to a complete revamping of the sales department.

•

Christmas sales will be swelled this year by the biggest Christmas Club distribution on record. The total will be about $920-million, up 2.7% from last year.

•

No more $2.95 shirts for F. Jacobson & Sons (Jayson brand). The company's spring line will start at $3.50.

•

Potash production is the next step for American Metal Co. The company will invade the producing field with a wholly owned subsidiary, Southwest Potash Corp., which already owns large deposits around Carlsbad, N. M. American Metal has arranged to borrow $7.5-million for the project, hopes to be in production by the end of 1952.

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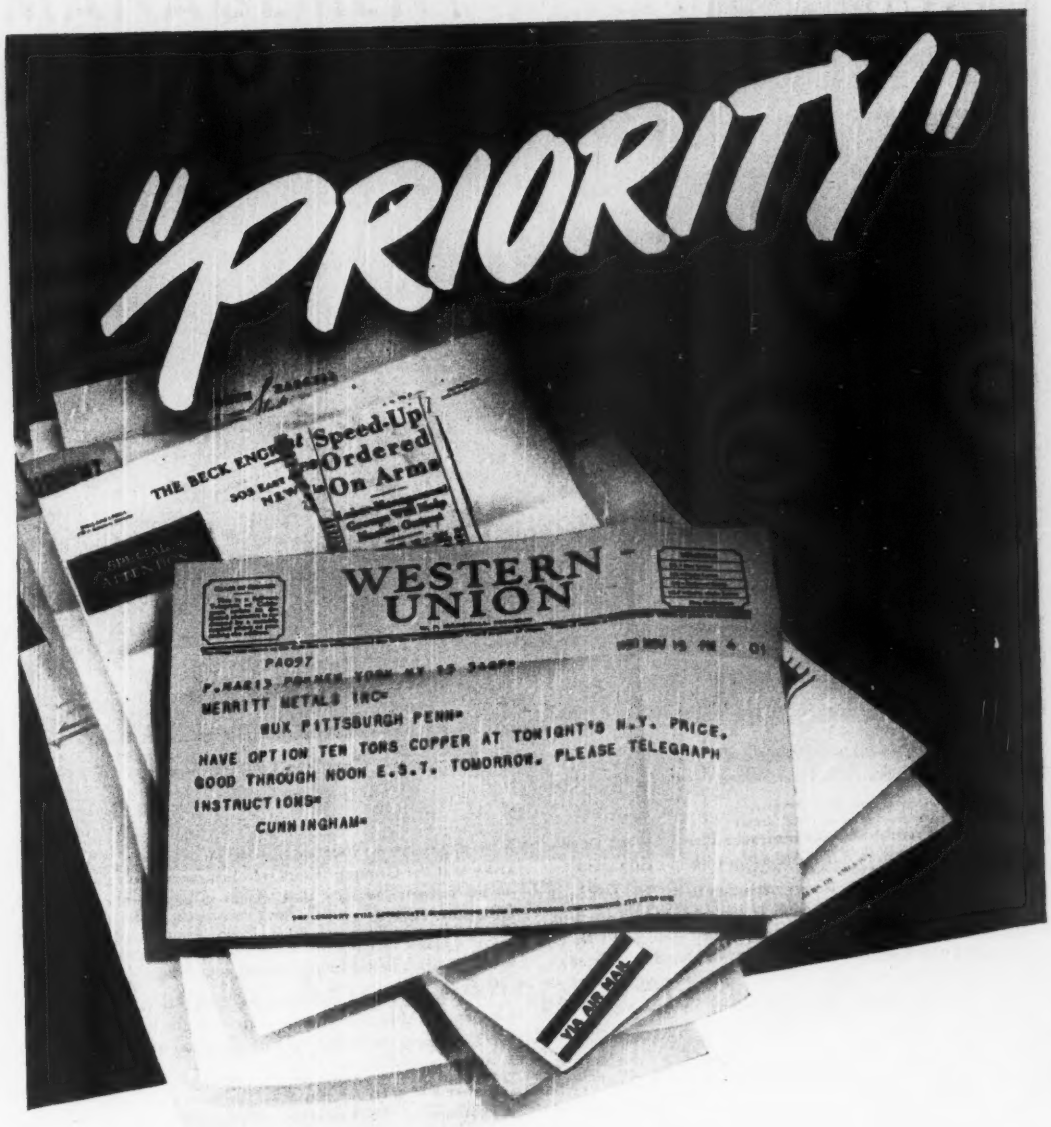
How housing curbs hit: Nearly 40% of the mortgage-financed new one-family houses in the last half of 1949 were bought with no down payment at all. A nine-city survey by the Bureau of Labor Statistics shows that, taking all VA-assisted homes together, down payments were 5% or less in 80% of the cases.

•

A good humor girl started her routes in California, breaking a 24-year-old all-male tradition. Said a company executive: "Women are just as good drivers as men."

•

Stopgap work—partial fabrication of 600 freight cars—will take up some of the shipbuilding slack (page 44) for Bethlehem Steel. But the company's yard still says it will have to cut to a standby work force unless it gets new ship orders.



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MANAGEMENT



ROBERT C. GOODWIN, Office of Defense Manpower: Labor recruiting outside your area is still full of trouble.



HARRY F. GRACEY, SKF Industries: A training program can help a lot. Our company started a five-year plan.



CHARLES D. DOERR, McKesson & Robbins: Training plans are good, but management has to know what's going on.



GEORGE C. HOUCK, Harris-Seybold: Don't wait for controls. A good personnel policy will make it easier to get workers.

What To Do About Manpower

Experts at Society for Advancement of Management meeting tackle two of business' biggest problems: where to find competent workers; how to upgrade them into supervisory spots.

Of the problems Korea heaped upon management, many are only beginning to be understood. Answers are still lost in a welter of speculation.

Among these is manpower. Last week the Society for the Advancement of Management spent much of its annual session in New York going over the question of how to get and train workers for the long rearmament pull ahead.

• **Workers and Bosses**—In the defense stepup, the manpower problem is in many ways unique. For one thing, you can't shunt human beings around the way you can scarce raw materials. Then, too, even assuming you can find enough production workers, where do you get supervisors? And how do you keep top executives in their jobs? Management men are bound to become restless as the need for smart executives puts a bigger and bigger premium on brains.

There is no easy solution to all of this. So far, industry's race for manpower has had to take its course with little direct help from Washington. Some experts say controls aren't needed; others aren't so sure. In a total war,



"This new contract means we've got to go ahead fast with our plans for a plant in upstate New York. Right now . . .



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★ ★ ★

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Thousands of "Shaw-Box" Cranes in hundreds of industries—in large power plants and railroad shops where costly equipment weighing up to more than 300 tons must be handled and in small plants handling loads as little as 500 pounds have proved and continue to demonstrate their dependability.

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the answer would be simpler: Freeze wages, jobs, ration men as well as materials. But we're in a semiwar economy, and that's what industry has to figure on for a long time to come. It makes finding effective answers a lot tougher.

• **Training**—Of the two manpower problems—hiring and training—the best, most concrete attacks by the SAM speakers were made on "management development." The top man in that line at SKF Industries, Philadelphia, is Harry F. Gracey. Four years ago he was called in to start a five-year program aimed at both ordinary business expansion or an emergency.

"The idea," he said, "was to create a hard-hitting management team." SKF trained 300 key people, from foremen on up. Each man was studied, his potentials enumerated, his weaknesses listed along with his strong points. Then on an individual basis, Gracey went to work correcting the weaknesses. Sometimes courses were given in groups; at other times individual conferences were used. Some men were sent to nearby schools for special training. With one more year to go on the management phase, SKF already has started a similar system (except that it's voluntary) for production workers.

• **Following Pattern**—McKesson & Robbins, Inc., has a training program for management a lot like SKF's. The first thing to do, said Charles D. Doerr, vice-president of personnel, is find out who has to be trained.

The next step is to have each department rate present executives. Third, said Doerr, train them. McKesson & Robbins does it by (1) regional conferences; (2) home office courses; and (3) divisional training courses for each operating unit. Through all this, management is kept fully informed of what's going on and what changes to expect. Doerr rates this phase—communications—high.

How do these programs pay off in a semiwar economy? Gracey's answer: "We're not losing key men. We're having little trouble from other companies stealing our people."

• **Hiring**—The question of what to do about hiring workers is a lot more complex. As a starter, Robert C. Goodwin, director of the new Office of Defense Manpower, told management what it shouldn't do. It shouldn't try to "pirate" labor. That's already started. West Coast airplane plants are luring New England skilled labor by free transportation, high pay, assurances of a place to live with their families.

Occasionally, Goodwin said, Washington will approve getting labor outside the local market. But that depends on where the labor is going, whether the job is vital defense work, and where the labor is coming from. Gen-



when regular lubrication fails, "Tiger" Bronze lubricates itself to prevent damage

One of our Sales Engineers recently reported . . . "The inexperienced maintenance man bolted down the bearing housing so tightly that the film of lubrication between shaft and bearing squeezed out. The equipment started up.

"Five long minutes of dry, metal-to-metal operation passed before the smoking bearing signalled shut-down. Examination showed the expensive steel shaft was unharmed because the lead content of the 'Tiger' Bronze bearing had sweated out and plated the running surface, cushioning the shaft and preventing seizure."

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erally, though, he frowns on labor migration.

Goodwin warned management that out-of-area recruiting often is not only expensive, but invites trouble. There's this possibility, too, Goodwin said. One big plant that was pirating labor found that it was pirating from one of its own subcontractors. His advice: Better to tap local sources, such as women, handicapped workers, unskilled labor, and the elderly.

• **Controls**—Under present conditions, Goodwin said, defense planners figure voluntary policies will keep the U.S. geared to the needed defense output.

But that isn't the opinion of Leo Cherne, executive secretary of the Research Institute of America. He told management to look for (1) voluntary controls of wages and manpower in three or four months; (2) their failures; (3) mandatory controls after that, which will last about two years unless there is total war.

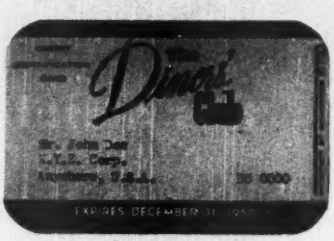
You don't have to sit back and wait for controls, though. If you're lucky, your company will be one with a "long-standing industrial relations policy." That way, says George C. Houck, assistant to the president of Harris-Seybold Co., Cleveland, you will have an easier time getting new workers and keeping old ones.

• **No. 1 Problem** – For firms like Harris-Seybold in the industrial areas of Ohio, manpower already is called the No. 1 mobilization problem. Take the word of Ray Suter, director of industrial relations of the Ohio Chamber of Commerce. He thinks small business has an even harder job ahead solving the labor shortage than the larger companies.

Other areas may be better off. Goodwin said only about a third of the nation is feeling a real labor pinch. "The labor market reports that we are now receiving from the public employment offices throughout the country," Goodwin said, "indicate that the impact of defense ordering and expanded defense production is now beginning to be felt. Scarce labor supply and important occupational shortages exist in about a third of our major production centers. Thus far this labor market development is largely concentrated in the North Central States around the Great Lakes, in the Southwest, and on the West Coast."

But he warned that the problem is spreading fast. His advice to management men:

(1) Make a complete and detailed inventory of present work forces; (2) check military status, draft vulnerability; (3) study your labor resources, where replacements can come from; (4) work with public employment offices; and (5) develop supervisory training—"it will drift down to all levels."



Credit Card "Pays" Entertainment Bills

The card pictured above is as good as money—for settling restaurant bills. It identifies you as a member, in good credit standing, of the Diners' Club. And that entitles you to sign the tab at any of 200 restaurants and clubs in New York, Chicago, Boston, Philadelphia, Miami, and Los Angeles.

You can apply for membership through the club's offices in New York's Empire State Building. If your credit rating is O.K. and you're willing to pay the $3 annual membership fee, Diners' Club will send you a card, and you'll get an itemized bill for your restaurant expenses each month.

• **Self Starters**—The club was started only nine months ago by Frank McNamara, former canvas manufacturer, and Ralph Schneider, whose law practice has become practically a sideline since. These two got the club going without outside capital.

Today Diners' Club lists over 22,000 members. Their restaurant bills total about $250,000 a month. The club assumes all losses and dunning expenses—which have been small so far. And for this it charges cafe owners a fairly handsome percentage of each member's monthly bill. The club is already grossing about $200,000 a year.

• **Selling Point**—Schneider's selling point to restaurants is that the credit card makes for bigger spending: It's practically painless. And these larger tabs make up for the fee that restaurants and nightclubs have to pay Diners' Club. The biggest bill that the club has handled so far was for $496. Others run as low as $1.25.

• **Corporations**—Besides its individual members, the firm has signed up corporations on a companywide basis. Any executive with a company card can charge his entertainment or expenses, have the bill sent to his home office.

Applications are coming in at a rate of about 100 to 150 a day, Schneider says. Main goal now is for complete national coverage. After that, Diners' Club plans to tap travel and hotel fields. Claiming origination of the idea, the firm says its only competition is the Dine & Sign Club, Chicago.



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HELPS TAKE THE WISHING OUT OF A WELL

Neoprene jacket protects sensitive electrode which locates oil-bearing formations

Much of the guesswork has been taken out of oil-well drilling by modern scientific equipment. For example, this device, termed a "Logging Electrode," can spot oil-bearing formations in the earth's strata. Suspended on an insulated electric cable, it's lowered at high speed into a well being drilled. By measuring differences in electrical conductivity of formations it passes through, and relaying its findings to the surface, this sensitive instrument identifies strata all the way to the bottom of the hole.

During its swift trip down the ragged hole, the instrument must stand up under terrific punishment. So, the electrode and cable are protected with a resilient covering to resist tearing and abrasion and to cushion shock. But no ordinary material can be used. Ever-present gas, oils, chemicals, high temperatures and pressures encountered would soon ruin it. That's why engineers specified Du Pont neoprene. Neoprene is tough and resilient and *retains* its resilient properties because it's practically unaffected by these destructive influences. It is the one resilient material able to provide the long-lasting protection needed in this tough service.

In almost every other industry, in a multitude of varied products . . . from household faucet washers to factory conveyor belts . . . neoprene's remarkable properties provide the same superior performance, lower maintenance costs and longer service life.

So when you have a tough job for a resilient product to do—think of Du Pont neoprene first. Ask your rubber manufacturer or tell us about your problem. While we do not make finished products of neoprene, we'll be glad to help you find a source of supply.

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Chase Grows Up

Little aircraft company wins big Air Force transport contract. Firm rents huge plant in Birmingham, will hire 9,000 workers.

Sometimes the little fellows get the big primary defense orders. Chase Aircraft Co. is one of them; it just succeeded in beating out Northrop and Fairchild for an Air Force contract for assault transports.

Last week Chase was moving from its two-hangar plant in Trenton, N. J., to the enormous Bechtel-McCone plane modification center in Birmingham, Ala. Chase has a 10-year lease on six bays of the center, with an option to renew.

• **There to Stay**—Michael Stroukoff, president of Chase, says he's moving to Birmingham to stay, that Chase will continue in civilian aircraft production after the military contracts have run out.

That's quite a break for Birmingham. After the war, the city took over the sprawling Bechtel-McCone setup, but found no tenants. Now with Chase moving in, the city has a promise of 9,000 new jobs, with an eventual payroll of $1-million a week. (Chase's will be the second largest payroll in the city.) Job seekers are already turning up at a rate of 150 an hour.

• **First Break**—The assault transport contract is the first big break for Chase, and for Stroukoff, its mainspring and guiding genius. Stroukoff, a graduate of a Czarist cavalry school, fled his native land in 1917.

Until 1924, he built bridges and railroads in the Orient. Then he came to the U. S. and practiced architecture. Among other jobs, he designed New York's Ziegfeld Theater.

When World War II began, Stroukoff submitted designs for a military transport plane. They were rejected. Later, the Army Air Force became interested in a wooden wing that he had built in the shop of Chase Bros. Cabinet Makers, Inc., in New York.

• **Gliders**—Success of the wing caused the AAF to give Stroukoff orders for various experimental gliders. In 1946, at the suggestion of the AAF, Stroukoff moved to Trenton so that he could handle larger contracts. That led directly to the present big contracts, which were awarded to Stroukoff after exhaustive tests.

The new two-motored planes—the XC123 and the YC122C—evolved from Stroukoff's glider designs. Exceptionally rugged, they are designed for landings and takeoffs under the rugged conditions of airborne assault.

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TWA's "Sky Merchants" offer a new daily service to and from the principal commercial and industrial markets throughout the U.S. Direct flights, with connections serving more than 60 cities. Fast, daily service coast to coast . . . overnight between most points.

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St. Louis	Detroit	Advertising Material & Displays	6.11
New York (Newark)	Indianapolis	Telephone & Telegraph Instruments & Parts	8.31
Indianapolis	Pittsburgh	Hardware	4.46

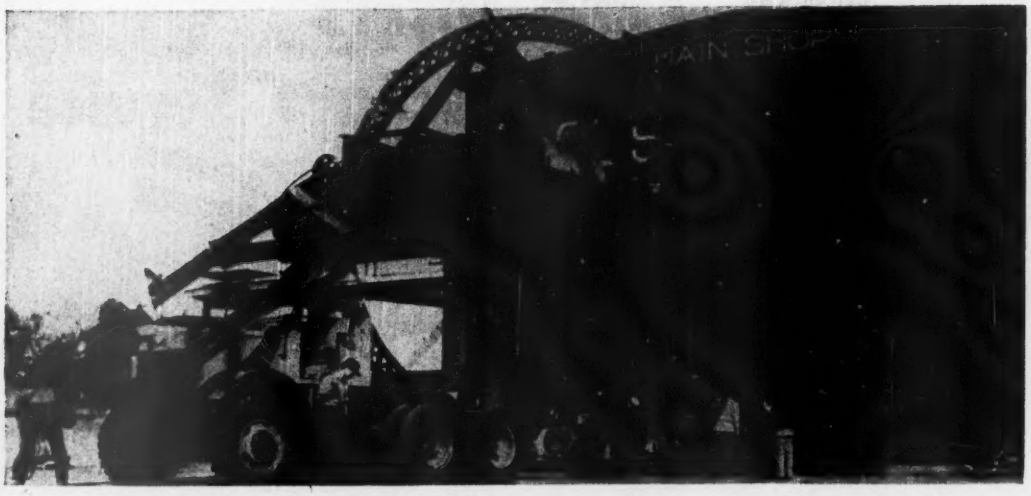
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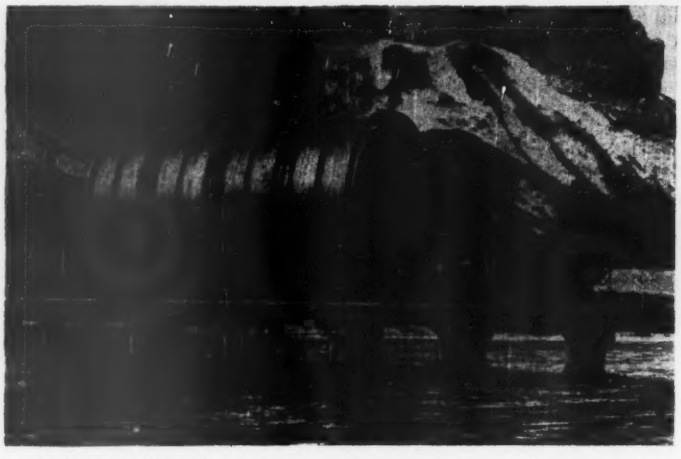


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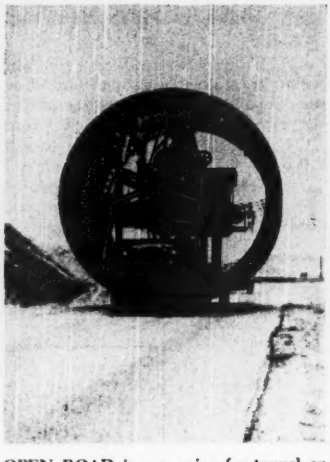
TRANSPORTATION



SUPERSTRUCTURE around trailer is series of expansion rings. Olson Mfg. designed them to haul pipe sections to Idaho dam site. Expansion rings fold inward when trailer is backed through pipe section, then open up to hold load in place.



OVER THE RIVER trailer crawls on wooden trestle. Trip from plant to dam site is about 8 mi. Man at rear of trailer steers from caboose; there are two in crew.



OPEN ROAD is easy going for tunnel on wheels, but not for car behind.

A Tunnel Takes to Trailer Travel

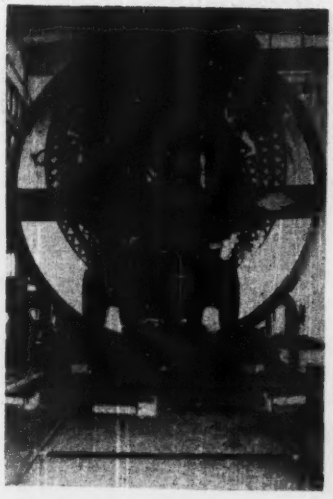
Highpockets is a most remarkable trailer.

It is probably the only trailer in the world that looks like a zeppelin hangar on wheels. And it is one of the few trailers that has ever tried carrying 23-ft.-diameter pipe in sections 40 ft. long.

Highpockets, as it is called by its crew, is the special design of engineers at Olson Mfg. Co., Boise, Idaho. It was built to haul pipe to line an outlet tunnel at Lucky Peak Dam on the Boise River.

Olson, a subcontractor on the job, is responsible for fabricating, delivering, and installing the steel lining. Installing it means a run of about 8 mi. to the dam site.

About the only way Olson could figure to get the lining off its property was to rig up the special contraptions you see above. The main innovation, of course, was the use of the expansion rings. Olson built them so that they would fold inward as the trailer backed through a pipe section. Then when the pipe was in place, the rings would open up to hold the load. Olson also installed portable air compressors to



CROSSBAR raises pipe and trailer. Rings spread against load; rear wheels drop.



HOLE OF ITS OWN is final stop at dam site. There trailer drops lining in tunnel.

power four hoists to control the ground height of the load.

Driving Highpockets is like steering a hook-and-ladder—only not so easy or so fast. One man drives up front while another follows course in the caboose. Passing, so far, has not been a problem.

All told, Olson's share of the Lucky Peak project will involve 1,158 ft. of 23-ft.-diameter pipe. Of this, 304 ft. will be fabricated of ¾-in. plate, and 854 ft. of ½-in. plate. Total weight of the steel used is approximately 2.2-million lb.

Aircomatic Welding cuts production time 80% ...eliminates distortion

CONSOLIDATED WELDING AND ENGINEERING COMPANY, Chicago, Illinois, faced a serious problem in the welding of aluminum air separators. The methods considered couldn't handle the variety of thicknesses involved economically. Furthermore, they were slow and cumbersome, and raised many distortion problems.



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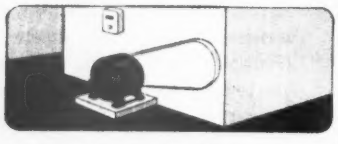
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663-109



BACK AND FORTH rumble trucks like this one in the Maryland highway test. After four months, the evidence indicates: Overloading wrecks the road.



TELLTALE CRACKS in the pavement of the measured course comprise the evidence. And the record remains, for workmen paint the cracks, indicate date they appeared.

Test Puts Finger on Heavy Trucks

Maryland road runs seem to show that bigger loads do vastly more damage than the weights recommended by highway engineers. But the evidence isn't all in yet.

Two-thirds of the way through the famous Maryland highway tests, this verdict seems to be in the making: Overloaded trucks are death on roads; moderate loads do relatively little damage.

• **Four Months**—The six-month test still has nearly two months to run. Formal conclusions won't be drawn until the end. But the preliminary evidence looks damning for the trucks with the outsize loads. Two types of trucks—single-axle and tandem-axle—are being tested. For each type, one test shows the effect of a truck loaded to the limit recommended by the American Assn. of State Highway Officials; the other is loaded to the much higher limit set by Maryland law.

In the single-axle test, damage done by the heavier load was more than six times as great as by the lighter. In the tandem axle, the ratio was 12 to one.

Highway departments of 11 states and the District of Columbia are paying the out-of-pocket expenses of the project. The Bureau of Public Roads is furnishing the technical personnel and instruments. Truck manufacturers supply the trucks, the petroleum industry the gasoline and lubricants.

• **Reinforced Concrete**—Here's how the test is run. Normal traffic has been routed off a 1.1-mile stretch of Highway 301 below Washington. This is a two-lane reinforced concrete road.

The stretch is divided for two half-mile test runs. In each course, one lane is for the lighter load, the other for the heavier. Both run back and forth, 24 hours a day, seven days a week.

The first test is for single-axle trucks, one loaded with the 18,000 lb. approved by the AASHO, the other with the 22,400 lb. permitted by Maryland. Up to Oct. 1, the 18,000-lb. load had



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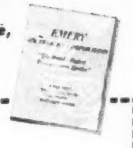
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made 136,000 runs over its test lane. In this time only 82 ft. of new cracks developed. In the same period, the 22,400-lb. load made 174,000 trips and produced 542 ft. of new cracks.

• **Tandem Axle**—The difference was far sharper in the test of tandem-axle trucks. Here the 32,000-lb. AASHO load caused only 249 ft. of cracks in nearly 84,000 trips. The 44,800-lb. Maryland load produced 2,968 ft. of new cracks in less than 82,000 trips.

These were the figures up to Oct. 1, and the tests are continuing. All except the tandem-axle one, that is. Between Oct. 1 and Oct. 13, the road traversed by the big trucks began cracking up so fast that the tests were halted. The idea was to save the few undamaged bits for other tests of intermediate loads.

• **Better Break**—On the face of things, these results would seem to make a clear case in favor of the AASHO limits. Especially since, in some technical ways, the tests give the roads a better break than actual traffic would.

For example, the test traffic runs back and forth in the same lane. Normal traffic would be all in one direction, hence would have a different effect on the joints of the road.

Moreover, both joints and shoulders get more careful attention now than under normal maintenance conditions. Despite this care, the pumping action of the traffic—forcing out the subgrade from under the pavement—has risen steadily during the test. This has been marked on the heavily loaded lanes.

• **Poor Subgrade**—The trucking people, watching the test with great interest, are critical of the figures on pumping. They point to the fact that much of the subgrade in the test stretch of road is made up of fine-grained plastic soils that make poor subgrades.

On the other hand, the pavement had stood up well under normal traffic since it was opened in 1941. Before the test, only 300 ft. of cracks had appeared. The accelerated traffic of the tests has added 4,000 ft. of cracks.

Neither the engineers who are running the project nor trucking officials consider the tests fully conclusive. Both point out that they show road effects on only one type of paving. The engineers want to conduct similar runs on bituminous surfaces, and on both reinforced and nonreinforced surfaces with different types of subgrades.

• **Sponsors**—The Maryland test is run by a four-man committee, assisted by a larger committee, on which both the American Trucking Assns. and the Automobile Manufacturers Assn. (Motor Truck Division) are represented. On the larger committee are also representatives of the 11 state highway departments, the District of Columbia, the Bureau of Public Roads, and the Army.

The world's fullest market basket naturally takes the shape of America. For that fact thank *industry* — steel mills and textile mills, paper mills and oil wells, machine tool plants and tractor plants, every place where wheels turn and men work. Wheels turn faster and men work more efficiently in *every* industry because of anti-friction bearings. And every industry knows and uses SKF Ball and Roller Bearings. Every industry knows SKF as pioneers. Every industry knows that SKF engineering anticipates their needs for exactly the right bearing to do the job at hand. SKF INDUSTRIES, INC., PHILADELPHIA 32, PA., *the Pioneers of the Deep-Groove Ball Bearing, Spherical Roller Bearing, Self-Aligning Ball Bearing.*

7031

HELPING MAP OUT *America's* 276-BILLION DOLLAR MARKET BASKET





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Shipbuilding Rests on Its Keel

Korea orders floated shipyards out of a spring slump but left them still lower than a year ago. There are big plans for new construction—but only plans. Labor and steel are getting short.

Good times are ahead for the nation's shipbuilding industry—if plans and proposals mean anything.

• The Federal Maritime Board proposes to build 200 high-speed (22-knot to 24-knot) cargo carriers. They would be 12,500-tonners, costing about $5-million apiece. The board is toying with a program that would call for 50 of these ships a year for four years.

• Great Lakes ore carriers have about decided to go ahead with plans to build five more big ore boats. They would be fast (19 knots) and long (610 ft.), sisters to six ore boats now on order or under construction in East Coast yards.

• Moore-McCormack Lines has plans to build two passenger ships of 23,000 gross tons and costing about $25-million apiece. That alone is firm.

• **Little Cheer**—But plans and proposals alone hold little cheer for shipbuilders today. A BUSINESS WEEK check of shipyards on both coasts this week shows that the industry is pretty near resting on its keel. The Korean war brought some activity—mostly in repair and reconditioning of World War II vessels. This was enough to bring the industry out of its postwar low point of last spring. But it's not enough to float it above its level of activity a year ago.

• **West Coast**—There has been no new ship construction on the Pacific Coast since June, 1948, when the liner President Wilson was launched. Ship repair has been the staple. The outbreak of the Korean war did bring a substantial increase in the business of reactivating military and commercial ships from the mothball fleet. But volume in West Coast yards has definitely slacked off in the last month.

Employment in San Francisco yards was down to about 1,500 last spring, the lowest in nearly 20 years. It jumped to around 4,000 during July and August. Now it's back down to a little over 3,000.

In the Seattle area, shipyards didn't even get much demothballing business. Builders there complain that while San Francisco yards got 31 Maritime Commission ships to recondition and Portland got 17, Seattle yards got only three. Said one Seattle shipbuilder: "The post-Korean rush is over. We had a flurry on voyage repairs. Now we are back where we were five months ago. It's a dreary outlook."

• **East Coast**—East Coast yards have fared a little better. One reason is that materials, labor, and planning costs are lower in East Coast yards than in the West. But the pattern of ups and downs is about the same: better than last spring, worse than a year ago.

One of the biggest yards on the Atlantic Coast reports that it has a payroll of $17-million now, compared with $6-million last spring and $34-million a year ago. This yard, which is more fortunate than most, recently got government orders to modify one aircraft carrier and reactivate 122 Victory ships.

One yard in the South, which has built several of the world's largest tankers, had to shut down in May after completing the last tanker on a contract order. This yard had never done any ship repair, only ship construction. It was not in a position to cash in on the sharp upturn in ship repair.

Another East coast yard, which was a very active builder for the government during the war, is now keeping alive by producing paper-manufacturing machinery.

• **Labor Shortage**—Even with this scarcity of jobs to do, shipbuilders on both coasts are having trouble getting enough skilled labor. Electricians, machinists, sheet-metal workers, pipefitters, and boiler makers are reluctant to leave steady jobs in land-bound industry for highly uncertain shipyard work—even though it often pays more.

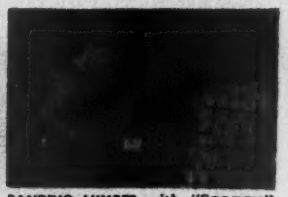
One shipyard reports that it figures on getting an average of three first-class workmen in 10.

• **Steel Shortage**—Materials are another headache, particularly steel. The new priority system of DO orders is taking its toll here. A Seattle yard says that its steel supplies are way down, and its suppliers say no steel unless you have a DO order.

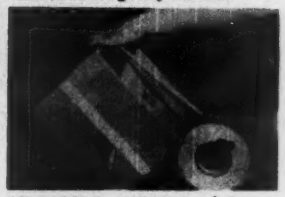
• **Floating Stockpile**—But shipping experts in Washington think that the steel shortage should offer no real problem—even in the event of a large-scale shipbuilding program. The Administration is all set to authorize the scrapping of up to 1,500 World War II ships now laid up in reserve. This fleet of 15-knotters—outdated now by the high-speed snorkel submarine—is a 9-million-ton floating stockpile of high-grade scrap steel.

Of course, Washington would have to get authorization from Congress for any new defense shipbuilding. And shipbuilders know that may be a long time in coming.





BANDING LUMBER with "SCOTCH" Brand Filament Tape virtually eliminates damage claims. Previous bundling methods caused average claims of 2% on a $1,500.00 truck load of bowling alley lumber.



REINFORCING CARTONS of heavy catalogs is safer, quicker with "SCOTCH" Brand Filament Tape. It's easy to apply and remove. And tape doesn't cut into cartons or contents or injure help.

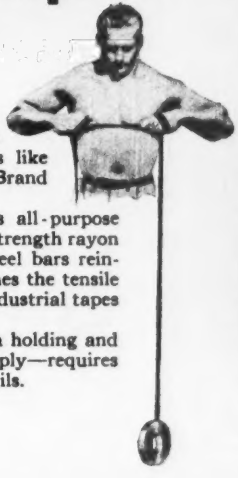


PACKAGING TELESCOPE-TYPE CARTONS is now accomplished 30% faster with the aid of "SCOTCH" Brand Filament Tape. The disposal problem formerly caused by other bandings is eliminated.



HANDY DISPENSER offers quick, easy method of dispensing tough, tear-resistant "SCOTCH" Brand Filament Tapes. Trigger-operated cutting edge retracts when not in use.

New super-strong tape is strapping success!



How would you package bulky school desks . . . bundle lumber for storage or shipment . . . reinforce cartons of heavy catalogs? Tough packaging jobs like these are easy with new, super-strong "SCOTCH" Brand Filament Tape No. 880!

What's the secret to the super-strength of this all-purpose packaging tape? Over 5,000 rod-like strands of high-strength rayon fibers reinforce every inch of tape width—just as steel bars reinforce concrete. That's why this tape gives you 5 times the tensile strength, 50 times the tear-resistance of most other industrial tapes now on the market!

"SCOTCH" Brand Filament Tape is solving tough holding and packaging problems in every industry. It's easy to apply—requires no expensive equipment. Write Dept. BW4 for details.



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Made in U.S.A. by **MINNESOTA MINING & MFG. CO.**, St. Paul 6, Minn., also makers of other "Scotch" Brand Pressure-Sensitive Tapes, "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-Slip Surfacing, "3M" Abrasives, "3M" Adhesives.

Why Bundyweld is

It's simple!

Bundyweld gets the manufacturers' calls because no other small-diameter tubing has all the features of Bundyweld. It's double-walled from a single strip, with an amazing combination of pluses for every product or application.

Just note the points below. Then think for a moment of all the ways Bundyweld can do a bang-up job wherever you use small-diameter tubing (and even possibly in places where you've never thought of using tubing!).



IT FIGHTS FATIGUE, IT'S EXTRA TOUGH;
YOUR BRAKE LINES LAST WHEN GOING'S ROUGH!

Bundyweld is the preferred tubing for the hydraulic brake line systems of most of today's cars. Reason: It's *tough* . . . holds up like a charm through stress, knocks, jolts and beating from vibration fatigue for the life of the car (or bus, truck, tractor). A point to remember if *your* tubing part has to take it!



IT WITHSTANDS STRESS, OUTSIDE OR IN;
IT'S ROLLED UP TIGHT, ITS WALLS ARE THIN.

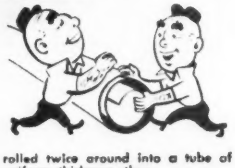
Double-walled Bundyweld is brazed through 360° of wall contact. Practically no chance for a leak under pressure inside or out! No wonder Bundyweld gets the play for radiant heating systems, beer coils, gas and refrigerant lines, or compressor and connector lines . . . vital spots where you can't afford to have a tubing blow its top.



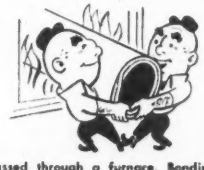
NOTE the exclusive patented Bundyweld beveled edge, which affords a smoother joint, absence of bead and less chance for any leakage.



First, a single strip of basic metal, coated with a bonding metal, is . . .



rolled twice around into a tube of uniform thickness, then . . .



passed through a furnace. Bonding metal fuses with basic metal, presto—



Bundyweld . . . double-walled and brazed through 360° of wall contact.

the preferred tubing

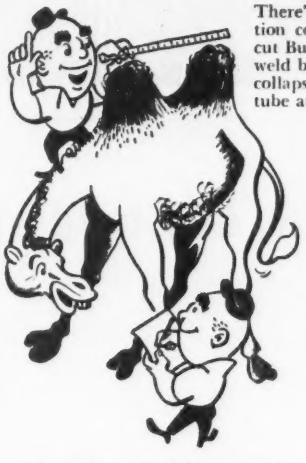


IT'S A SINGLE STRIP THAT'S ROLLED UP DOUBLE; STRONG AS AN OX, IT SAVES YOU TROUBLE.

There's hardly a major field in industry where extra-strong, double-walled Bundyweld Tubing hasn't helped solve a knotty design or production problem, with a better product, faster production or lowered costs resulting. Bundyweld is strong yet thinner walled, and possesses good heat conductivity characteristics. Available in Monel, nickel or steel.



IT BENDS AND COILS AND FORMS IN A BREEZE; YOUR PRODUCTION LINE MOVES WITH INCREDIBLE EASE.



There's a preference for Bundyweld's lower fabrication costs, too. You can bend, shape, flare, taper or cut Bundyweld in fast, trouble-free operations. Bundyweld bends more readily, takes more bending without collapsing structurally. Keen inspection of finished tube at Bundy means no costly double-checks for you.

THE TOUGHEST BEND IS A PERFECT FIT, WITH BUNDY SKILLS TO TAILOR IT.

Bundy engineers take pride in finding ways to turn out new complicated bends to order. If a bending fixture hasn't already existed to turn it out, many a time they've set to and developed one. If your new tubing part is a maze of coils and twists and bends, that's just another reason for calling on Bundy . . . now.

SO check on the job your tubing must do
And have your designers make a review
Of how Bundyweld Tubing, with its features so fine,
Helps beat your competitors all down the line.



FREE! Send for Bundy's 20-page booklet giving properties and uses of Bundyweld Tubing plus facts on its fabrication. It may well help spark a money-making application of Bundyweld Tubing for you. For booklet, or for queries on a possible use of tubing, just call or write: ***Bundy Tubing Company, Detroit 14, Michigan.***

Bundyweld® Tubing

DOUBLE-WALLED FROM A SINGLE STRIP

Bundy Tubing Distributors and Representatives: ***Cambridge 42, Mass.:*** Austin-Hastings Co., Inc., 226 Binney St. • ***Chattanooga 2, Tenn.:*** Poirson-Dookins Co., 823-824 Chattanooga Bank Bldg. • ***Chicago 32, Ill.:*** Lapham-Hickey Co., 3333 W. 47th Place • ***Elizabeth, New Jersey:*** A. B. Murray Co., Inc., Post Office Box 476 • ***Philadelphia 2, Penn.:*** Rutan & Co., 404 Architects Bldg. • ***San Francisco 10, Calif.:*** Pacific Metals Co., Ltd., 3100 19th St. • ***Seattle 4, Wash.:*** Eagle Metals Co., 3628 E. Marginal Way ***Toronto 3, Ontario, Canada:*** Alloy Metal Sales, Ltd., 881 Bay St. • **Bundyweld nickel and Monel tubing is sold by distributors of nickel and nickel alloys in principal cities.**

RESOURCES



1 Like a stadium of the giants is Kennecott's Bingham mine in Utah. Once a mountain itself, now a pit, the mine has yielded 558-million tons of low-grade ore since 1904. Here a power shovel loads ore into a train, after miners have blasted it loose.

From Low-Grade Ore to Pure Copper—



3 Smaller now, down to ¾ in., ore passes through the grizzlies (sloping bars). It will be dust soon.



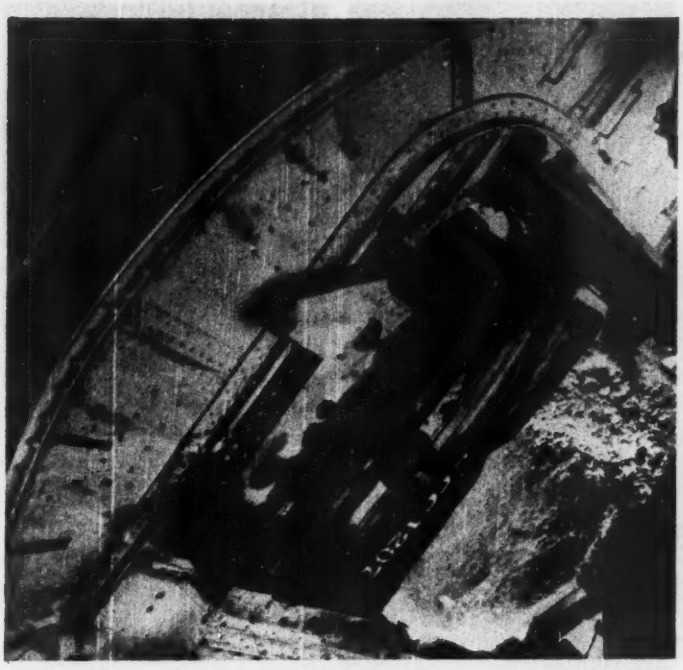
4 Ore dust is only .95% copper when it enters these flotation cells. When it leaves, copper content will be 33%.

They laughed when the ancestors of Kennecott Copper Corp. sat down at their copper mine near Salt Lake City. Kennecott was playing with ore that assayed 2% copper. Other copper firms were junking richer stuff than that.

That was close to 50 years ago. And Kennecott is still putting blue chips on its once-revolutionary idea that if you handle enough tonnage of low-grade ore, it will pay off. It has worked out handsomely.

• **New Refinery**—Next week, Kennecott's top brass, including directors, is meeting at Salt Lake City to see its latest Utah property—a $16-million electrolytic refinery, the first built in the U.S. in 20 years.

The refinery, at Garfield, Utah, completes a chain that will take copper from the mine to the pure ingot, all in an area of a few miles. Pre-refinery, Kennecott handed its copper concentrate over to the nearby American Smelting & Refining Co. AS&R smelted the stuff, then shipped the 98% pure copper to refineries in other



2 Mighty hand of the unloader grasps ore car, tilts it to dump load into the gyratory crusher, which begins task of reducing rocks to dust.

Kennecott's New Setup

parts of the country. There it was processed into marketable form.

In the new setup, AS&R hands the smelted copper back to Kennecott, which refines it right on the spot, then ships the finished product to customers. The refinery, when it's shaken down, will turn out 12,000 tons a month of 99.9% pure copper.

• **No Good Ore**—It sounds simple now, with Kennecott's Utah Copper Division turning out 30% of our domestic newly mined copper, 12% of the world supply. But it isn't; the U. S. simply hasn't got any more high-grade copper ore. Kennecott's ore is down to .95% copper content from its original 2%. It takes 2,000 lb. of rocky ore to produce 19 lb. of copper. At today's prices, the 19 lb. will bring $4.655.

Put it another way. Kennecott has been shoveling ore out of its great open-cut mine at the mouth of Bingham Canyon for 46 years. Just to get at the low-grade ore, it had to strip away 662-million tons of waste. Since then, it's taken out 558-million tons of ore. The net product, after the infinitely complex process of grinding, smelting, and refining: 4.9-million tons of copper.

The mine has bored 1,900 ft. into the earth. In the pit alone are 160 miles of railroad track. Other rail lines carry the ore to mills that grind it down to dust that will pass through a 100-mesh screen—10,000 openings per sq. in. After that comes the smelting and refining.

• **It Pays Off**—It's a profitable molehill that is turned out by this mountain of effort. Good season, bad season, stockholders have fared pretty well. Last year, they received $4 dividends from earnings equal to $4.25 a share.

Kennecott's managers are not saying how their new $16-million investment will pay off. Integration, and ultra-modern handling devices, ought to bring costs down. It happened before. Twenty years ago, Kennecott figured it would have to stop mining if copper content of ore fell below .8%. Now the cutoff figure is down to .4%.

(TURN TO NEXT PAGE)

specialists in

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These three steel warehouses normally carry in stock the complete range of cold rolled strip steel specialties made by The Cold Metal Products Company, including low carbon and high carbon analyses, tempered spring steel and stainless grades in the 300 and 400 series. Supply problems are now very difficult. Currently, shortages exist in some grades and sizes, but within the limits of inventory possibilities strip steel fabricators continue to find justification for the descriptive phrase long identifying all Precision produced CMP products—"More feet per pound—more finished parts per ton."



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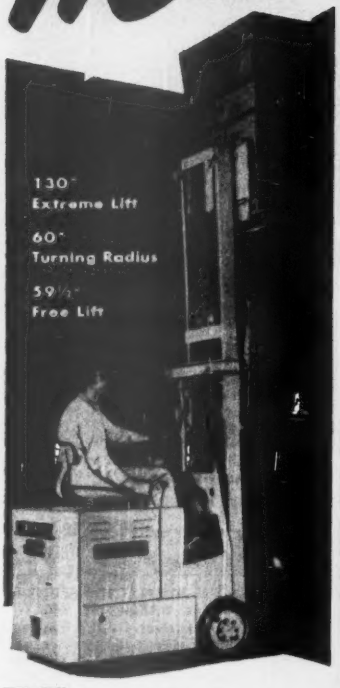
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KENNECOTT (Continued from page 49)



5 After flotation, metal particles form mud, which is dropped into hopper by huge canvas-covered wheels.



6 Copper concentrate now takes a trip to a smelter. Here a workman prods obstruction in reverberatory furnace.



7 American Smelting & Refining Co. handles Kennecott's Utah smelting. Here a casting wheel forms molten copper, now 98% pure, into anodes—thick slabs with built-in shoulders for hanging in later process.

(TURN TO PAGE 52)



The bundle of sticks

A wise old man called his quarrelsome sons about him. Taking up a bundle of sticks, he commanded each in turn to break the sticks. All tried, but in vain, and said it could not be done.

"And yet, my boys, nothing is easier to do," said the father, as he undid the bundle and broke the sticks, one by one. "By this example, you can see that united you will be more than a match for your enemies; but if you quarrel and separate, your weakness will put you at the mercy of those who attack you."

The useful truth of this fable is just as timely today as it was when the Greek ex-slave Aesop told it 2,500 years ago. You, a patriot, believing in individual liberty and freedom for all, see our American way of life threatened by the menace of communism abroad and jeopardized at home by complacence, negligence, confusion and incompetence.

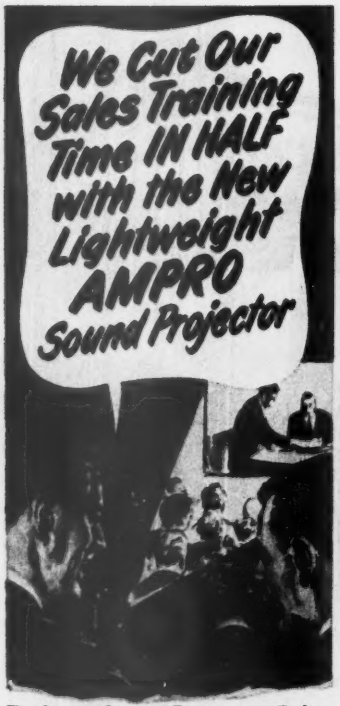
As a business leader in your own community, you have a particular responsibility to help unify your fellow citizens and guide their thinking and action--for the strengthening and preservation of the ideals that built America, in fact, made America the envy and goal of the very individuals now seeking to destroy it. *In Union there is Strength.*

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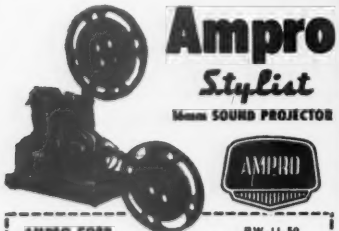
RAILROAD TRACK SPIKES - CONDUIT - HOT AND COLD FINISHED CARBON AND ALLOY BARS - PIPE AND TUBULAR PRODUCTS - WIRE - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - RODS - SHEETS - PLATES.



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You, too, can cut sales training time up to 50% with the revolutionary Ampro Stylist—sell everything from soap to good will effectively in less time! No other projector is so practical for business use—weighs only 29 lbs. complete with 8" speaker—so simple to set up and thread, an office boy can run it! You'll find the features of costly projectors in the economical Stylist. Mail coupon today!

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City.....*Zone*.....*State*.....
BW-11-50

KENNECOTT (Continued from page 50)



8 The last 2% of impurities are hardest to remove. It's done by electrolysis in Kennecott's new $16-million refinery. These workmen are stripping the cathodes—thin sheets of pure copper—from the blanks they were formed on.

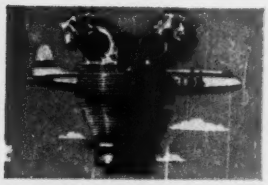


9 Overhead crane lowers a unit of 36 anodes into a cell. Spacing allows just enough room for insertion of the cathodes. These draw the copper from the anodes under electrolytic current. Impurities drop to bottom of tank. (TURN TO PAGE 55)





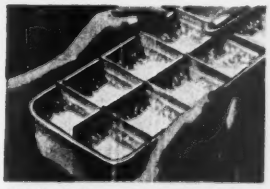
Conductivity means more speed! Your pressure cookers and other cooking utensils made with Kaiser Aluminum distribute heat more evenly . . . "hot spots" are eliminated. Insist on *aluminum* pressure cookers when you buy!



Conductivity means more efficiency! The cylinder head of a modern aircraft engine has a maze of aluminum fins which quickly dissipate the intense heat that is generated. Aluminum's light weight combined with strength also make it the logical metal to use.



Conductivity means better heat! The ironing surface of today's improved electric iron is made of aluminum to assure rapid and even distribution of heat. And its light weight and beautiful appearance add to its value.



Conductivity means more cold! Your ice tray is made of aluminum because it rapidly conducts heat away from the water, speeds freezing. That's why you'll find it in every major refrigerator and frozen food locker.



Conductivity means more comfort! Modern heating units employ aluminum fins which, because of their conductivity, quickly throw heat out into the room. In air conditioning equipment, too, aluminum fins contribute to greater efficiency.

Egg mystery...its solution benefits you!

Why will this egg cook quickly and evenly though it's four feet away from the flame?

Because the "griddle" is made of *aluminum*. And aluminum conducts heat rapidly and evenly over the whole cooking surface.

The exceptional heat conductivity of aluminum is *only one* reason why it is important to your better living . . .

For no other metal possesses aluminum's *unique combination of advantages*—among which are lightness, strength, freedom from rust, matchless beauty.

As a major supplier to manufacturers of the products shown here, and thousands of others, Kaiser Aluminum has built an outstanding reputation for quality and service.

Kaiser Aluminum is produced by Kaiser Aluminum & Chemical Corporation, Oakland, California. 52 sales offices and distributors in principal cities.

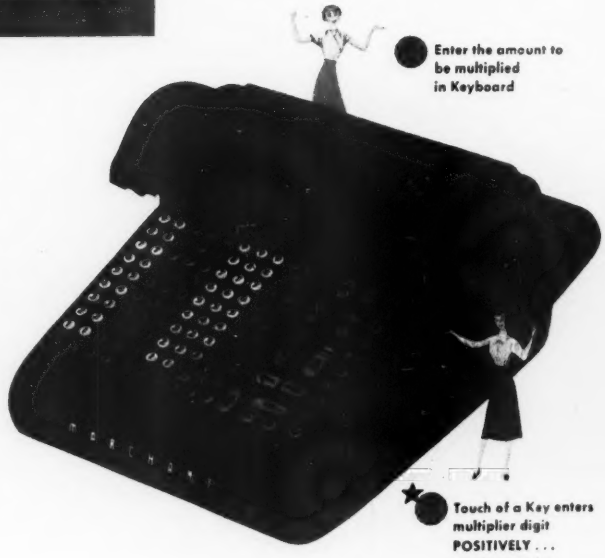
Kaiser Aluminum

A major producer in a growing industry



push-button* multiplication

If you've been putting up with a bar-type, semi-automatic calculator, you'll smile too when you see how SIMPLE, FAST and POSITIVE multiplication is on a MARCHANT—the only calculator with PUSH-BUTTON multiplication—on both the FIGUREMASTER, designed for heavy-volume production . . . and the new low-cost FIGUREMATIC. Since more than half of all figuring done on calculators is multiplication, the calculator that will do your work easier and cheaper is the one with PUSH-BUTTON multiplication. The MARCHANT MAN in your phone book is ready to prove this by a demonstration in your office—call him today or mail the coupon.



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Touch of a Key enters multiplier digit POSITIVELY . . . Carriage shifts AUTOMATICALLY . . . answer appears SIMULTANEOUSLY

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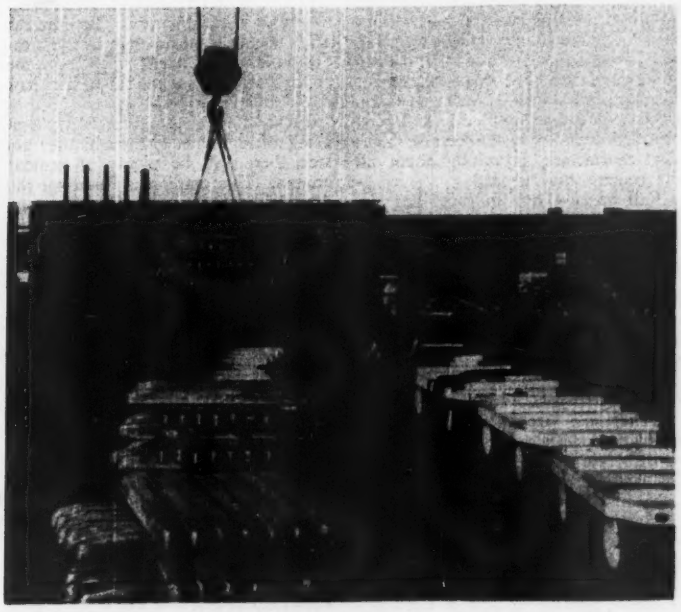
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KENNECOTT (Continued from page 52)



10 The pure copper is generally melted in electric arc furnaces and cast into wire bars, ingots, and ingot bars. This casting wheel catches a stream of pure copper, forms it into wire bars, then dumps it into a cooling water bath.

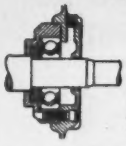


11 From mine to marketable copper, Kennecott and AS&R handle the whole process in their Utah setup. Overhead cranes lift these finished wire bars like loaves of bread, load them into freight cars for trip to eastern customers.

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Cement Shows Spot Shortages

Slow start of spring orders caught industry off guard, but no national shortage is in sight.

Ever since World War II the cement industry has been living in a sellers' market. Yet the market seldom, if ever, has gotten out of hand. By keeping mills running at capacity, the industry has managed to fill orders pretty much as they came in.

• **A Tight Race**—But last week, in some parts of the country, demand threatened to outdistance supply. Some areas had serious spot shortages; a man couldn't buy a bag of cement for love or money.

There are several reasons for the tremendous cement consumption right at this point. First of all, October is generally the peak month for construction. Inventories that plants have built up during the slack season usually disappear. That means that they have to fill orders right off the mill stream. Cold weather sets in just in time to bring construction slack—and prevent serious cement shortages.

• **Standstill**—This year there's a little more to it than that, and it goes back to last spring. Ordinarily, the big surge in cement buying starts around the end of March, when construction gets under way. Last March it didn't—partly because of a rainy, cold spring.

Storage bins at cement plants filled up almost to the brim as orders from their small customers failed to come in as usual. Some companies had to go as far as to shut down plants for lack of business—and storage space. Others did some fast selling, signed contracts with big customers like highway contractors, promising them all the cement they needed.

• **Full Speed**—Then in June, the picture changed almost unbelievably. Builders who had been put behind schedule by bad weather wanted to catch up, put on extra men to do it. Almost overnight the demand for cement was double what it was even in ordinary boom times. By August the inventories of most plants had completely vanished; some mills were as much as six weeks behind on orders.

What had happened was that almost everyone had underestimated the construction picture for 1950. Housing, particularly, fooled many.

Meanwhile other types of construction were booming, too. Highways were up 35% over last year; industrial and public building took more than their normal share of cement.

• **Spotty Quality**—In view of the boom construction year, probably the most remarkable thing about the cement situation is that the shortage hasn't been more widespread. Actually, it has occurred on a highly regional basis—largely because cement is a highly regional industry. The areas most affected have been Florida, Virginia, Cleveland, Chicago, and Kansas City.

Even though these shortages are spotty, the figures on cement imports show how serious they are. In August of this year alone, cement imports hit a total of 110-million bbl.—the figure for all of 1949. At the same time, exports are way down: They'll run around 2-million bbl. this year as against 3.8-million for last.

• **Production Up**—The reason that the shortage hasn't been national is mainly that cement production has increased rapidly. Since 1946, cement companies have upped their total capacity by 18-million bbl. a year.

The production increase has been due partly to construction of new plants or expansion of existing plants. But much of it has been due to increased efficiency—better flow of materials, better design of equipment, better management.

• **Next Year, Too?**—As for what will happen next year, there is wide disagreement within the industry. One big Chicago distributor believes it will be worse than this year. He foresees a big construction program in the area. So he figures cement will get tight around next July—a month earlier than it did this year.

Most others in the industry don't go along with this view, though; they are sure there will be plenty of cement around. This opinion is based on the drop in housing starts. One company estimates that the lower housing goal that the government wants next year (800,000 to 850,000 units) will knock 24-million bbl. off demand. The company figures that means everyone will wind up with a surplus of cement.

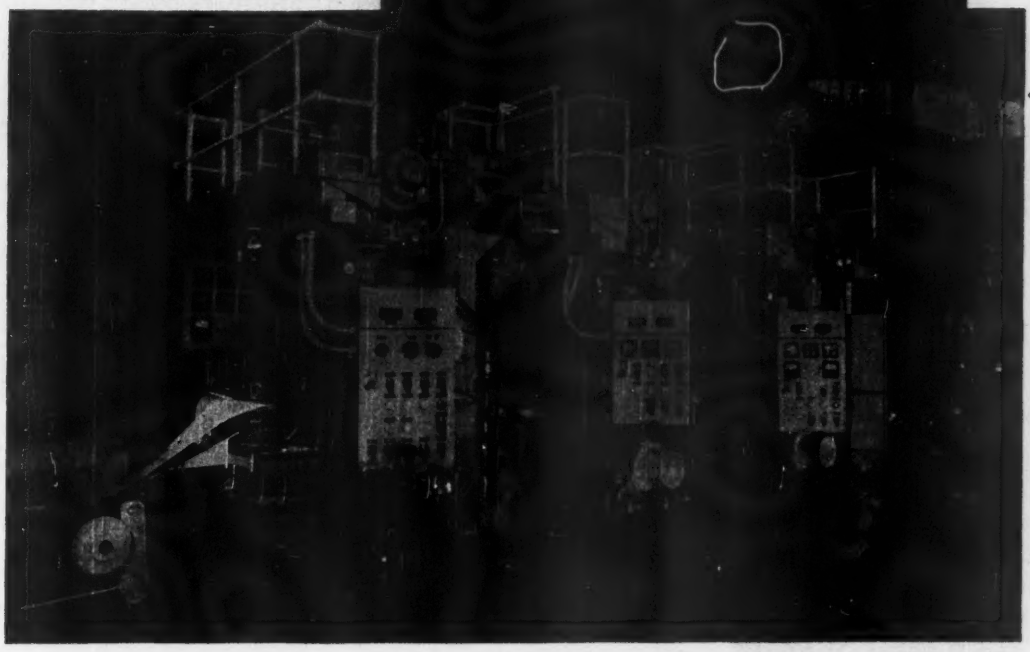
• **Other Construction**—Against this is the fact that other construction is going to be up. Highways will probably be stretching across the country at about this year's high rate. Industrial expansion will require a tremendous amount of cement (page 19). Defense building and other public works may be bigger than the industry estimates.

Meanwhile, it looks as if cement prices will remain steady. Around Oct. 1 there was a rise of 10¢ a bbl. (it's selling for $3.85 a bbl.). Even after the construction season—around the middle of this month—the price will remain at that level: New wage and welfare agreements will keep it there.

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20" x 26" x 24" 4-high, 3 stand tandem cold mill



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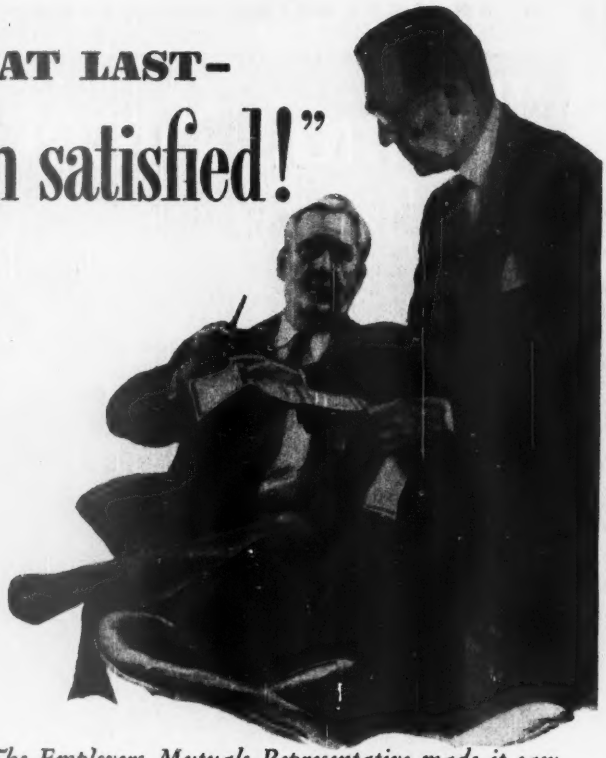
This latest expansion has, of course, been possible only through the co-operation of the many manufacturers who have so enthusiastically adopted Thomas Strip for their products. To them, this forward step promises a future of improved service and better-than-ever Thomas Strip quality.

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REGIONS

Du Pont's Dixie

The company is buying more and more land in the South. Already about half its plant investment is there.

"The question is," a South Carolina businessman said last week, "whether du Pont is out to buy up the South."

In a gibing way, other people have wondered, too. Only two weeks before, E. I. du Pont de Nemours & Co. had said it would buy 911 acres on the Pee Dee River near Florence, S. C. And only a week or so before that, the company president, C. H. Greenewalt, in dedicating a new plant at Camden, S. C., had said that about half the company's plant investment was already in the South—with more to come.

• **Close to Market**—Du Pont's Dixie invasion is the product of a number of factors. The main one is that much of its market is in the South. But water power, raw-materials sources, and labor play a part, too.

Over the last 20 years, more and more of the textile industry has come to settle below the Mason-Dixon line. Du Pont, with its synthetic fiber operations, has naturally followed the shift.

• **Around the Map**—The company opened a rayon-yarn plant at Old Hickory, Tenn., in the early 20's. Since then, it has built an acetate plant at Waynesboro, Va., a viscose-rayon plant at Richmond, and nylon plants at Martinsville, Va., and Chattanooga, Tenn. A third nylon plant is now planned at Kinston, N. C. At Camden, S. C., a new Orlon unit just went into operation; but a second factory to make the new synthetic in staple form was started even before the first plant had been finished.

• **Supply, Too**—Around this net of manufacturing plants, du Pont has built factories to supply the intermediates for synthetic production. One is at Belle, W. Va., another is at Orange, Tex., and a third is at Victoria, Tex.

The Victoria plant, which will make intermediate chemicals for nylon production, won't go into operation until next spring. Close to the petroleum fields, it will have ready access to the supplies it needs. Its chemicals will be shipped to Orange for further processing, and then on to the nylon and plastics plants. When completed, Victoria will employ about 300 people. Most of the operations will be either outside or in open buildings typical of Southwest chemical plants.

Kimpak* Float Packaging



Kimpak surface protection of General Electric Diesel locomotive

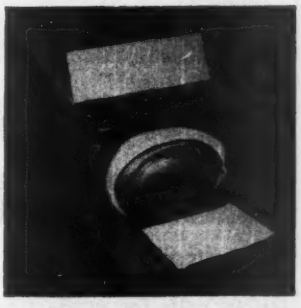
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READERS REPORT

Whose Power?

Sirs:

We read your excellent magazine carefully each week and find it extremely valuable. Therefore, this is written in a spirit of constructive criticism.

On page 76 of the Oct. 28 issue you refer to the Middle Tennessee Electric Membership Corp. as "public power." Upon investigation, you will learn that that corporation and this one—and over 900 others—are definitely not "public power," but are positively owned and controlled by the consumers who are members.

May we suggest that power systems are all "public" to some extent, but some are "investor-owned," some are "government-owned," and some are "consumer-owned."

Please continue to keep your excellent magazine excellent.

R. E. THOMSON

CARROLL COUNTY,
RURAL ELECTRIC MEMBERSHIP CORP.,
DELPHI, IND.

Beat-the-Taxes, Inc.

Sirs:

Reading your article "Machine Tools for Rent" [BW—Oct.28'50,p92] points up another effect of the tax program on our economy.

Aside from the lack of venture capital, loss of incentive for expansion, etc., there is a much more serious and long-term effect. Since the advent of "high" taxes, it has been increasingly inviting for some of the best brains in the country to spend time and effort finding methods to save taxes. In fact, an entire new industry has developed which can be loosely classified as a "Tax Nullification Industry."

This is a natural concomitant of high taxes, and as the stakes go higher it will be more and more profitable for higher-grade brains to be employed in this industry, along with the necessary manpower for clerical and statistical work. This, in turn, necessitates better brains and more manpower on the part of the government agency to obtain the revenue that they expected the higher tax to bring. Or else the tax rate is merely raised, which is an invitation for more experts to devote more time to "Tax Nullification."

As we continue under a high tax economy, more firms and devices like "Rentco" will be established, and this industry will become stronger and employ more people and exert an additional influence to keep taxes high. So that at some future date we may see

To Every Management Seeking Better Methods of Distribution



Are you holding a good product down?

Give your cargo a chance to fly
—watch your sales soar

As 1951 APPROACHES, more and more distributors are turning to Airfreight to gain a competitive edge in an ever-increasing competitive market. For, from dahlias to diesels, this modern form of transportation can develop new potentialities in any product with a wholesale value upwards of 50¢ per pound.

When cargo moves in volume at air speeds, you can compete successfully in distant areas with local manufacturers or enter new ones previously forbidden by your product's perishability. Today, it is demand alone, rather than time or distance, that defines the sales territory of the air-minded manufacturer.

Another benefit . . . equally important but not so apparent . . . is Airfreight's ability to lower the overall cost of doing business. Overnight deliveries reduce inventory requirements while lighter handling cuts insurance rates and eliminates the need to buy and pay freight on expensive packaging.

It is because of these many advantages affecting all phases of distribution that the original choice of Airfreight must be a management decision. Let an American Airlines representative tell the story of Airfreight in terms of your business and you'll readily see why today more than ever, it pays to do business from the ground "up." For complete information, write today to American Airlines, Inc., Cargo Division, 100 Park Avenue, New York 17, New York.

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No. 23 in a Series on Plastics Skill at Work...

PROJECT
Transformer Switch Frame

MOLDER
McDonald Manufacturing Co.

MATERIAL
Durez electrical insulating phenolic plastic



TRANSFORMER SWITCH FRAME for operation in oil. End and side views show how custom molder used loose coring to eliminate machining operations. Durez formulation used here has excellent arc-resisting qualities. Custom molder's skill determined pre-heating rate that increased dielectric properties of the material.

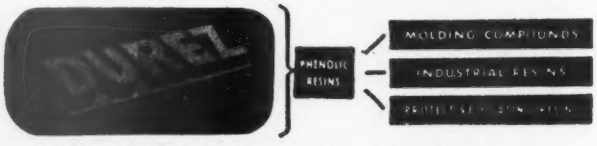
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Here, choice of the proper molding method speeded up output by 50%. Pre-heating at the optimum temperature further shortened the molding cycle. In test, this also was found to enhance the inherent dielectric properties of the material by improving its density. Use of loose coring eliminated costly machining and took full advantage of the natural lustrous finish you get in molded Durez.

Working closely with custom molders, our staff of Durez technicians brings you our specialized experience in the great phenolics group. Let them help you use most successfully the broad scale of mechanical, chemical, and electrical properties of Durez in your product development work. Write Durez Plastics & Chemicals, Inc., 4011 Walck Road, North Tonawanda, N. Y.



PHENOLIC PLASTICS THAT FIT THE JOB

the incongruous picture of a large corporation maintaining a strong lobby in Washington for the purpose of raising corporation taxes and keeping them high. This, if anything, shows how our economy is being undermined.

F. D. GRAHAM
WEST ORANGE, N. J.

Decimal Trouble

Sirs:

I have read with interest your article on "Stocks the Trusts Like Best" [BW—Oct.14'50,p111]. It is particularly gratifying to learn that Gulf Oil stock tops the list in both value of shares held, and number of trusts holding shares.

In the event that it has not already been brought to your attention, I believe that the Gulf figure for total shares held should read $30.8-million, instead of $3.08-million as indicated.

A. H. LEMMON
ASST. COMPTROLLER,
GULF OIL CORP.,
PITTSBURGH, PA.

• BUSINESS WEEK is grateful to Reader Lemmon for calling this to our attention. In our haste to print the good news, we inserted the decimal point too quickly.

Preventive War

Sirs:

I enjoy reading BUSINESS WEEK *and get a good many helpful ideas from it. I also find its advertising pages very interesting and helpful, and hardly an issue goes by but what I am calling the attention of my associates to items or services that appear in your pages.*

At times I have criticized what appeared on the last page—"The Trend." Now I want to compliment you. You express my sentiments perfectly on the subject of preventive war [BW—Oct.21'50,p132]. I want to answer the last sentence in that article with "Not if we have any sense left."

O. E. GEPPERT
GENERAL MANAGER,
DENOYER-GEPPERT CO.,
CHICAGO, ILL.

• In this Trend, we said: "The last man to start a 'preventive war' against Russia was Adolph Hitler. . . . His losses in Russia cost him the war and ruined his country. Shall we let ourselves be trapped by the same idea?"

Sirs:

In your issue of Oct. 21, you denounce the idea of preventive war. This is a useful service, for which we thank you.

BERNARD G. WARING
YARNALL-WARING CO.,
CHESTNUT HILL, PHILADELPHIA, PA.



No 4 o'clock business slump here!

NINE TO FIVE is a breeze for this young executive—with never a letdown in between.

Why?

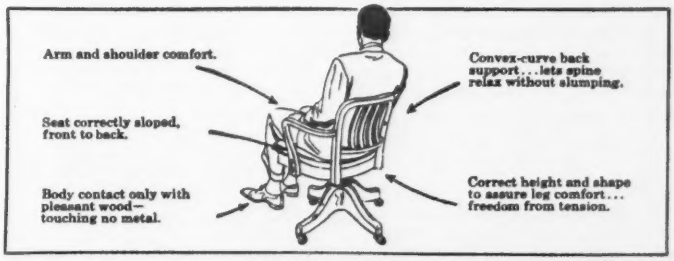
One reason is that his chair works with him—keeps his body "at ease," his mind at "attention" all day long—helps him to make full use of time, the most critical factor in business today.

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Year Ended June 30	Putting these straights and blends into bottles . . . (Millions of Wine Gallons)	Drew down distillers' stocks this much . . . (Millions of original proof gallons)	Leaving enough stocks still aging . . . (Millions of original proof gallons)	To last this long at consumption rate of previous year
1942	136.0	107.4	516.0	4 yrs. 9 mos.
1943	135.3	111.6	428.4	3 yrs. 9 mos.
1944	96.4	76.2	348.6	4 yrs. 6 mos.
1945	143.2	82.6	307.6	3 yrs. 9 mos.
1946	163.8	81.0	374.1	4 yrs. 6 mos.
1947	166.2	77.2	464.8	6 yrs.
1948	149.2	71.7	522.3	7 yrs. 3 mos.
1949	142.6	69.0	602.9	8 yrs. 9 mos.
1950	139.7	77.7	643.3	8 yrs. 3 mos.

Data: Alcohol Tax Unit, Bureau of Internal Revenue. © BUSINESS WEEK

Distillers Worry, But Stocks Are Ample

How long output holds up depends on rearmament. Synthetic rubber program will mean at least partial conversion.

The table above has some reassuring news for the drinking man. It shows that, despite the demands of rearmament on the distilling industry, he is going to be able to get his favorite brand of straight whisky for some time to come. And if he is not too fussy, they practically assure him that he won't go dry in the foreseeable future.

Two columns of the table tell the story. The first shows how much total whiskey has been bottled yearly by the distillers over the past nine years. This includes both straights (100% whiskey) and blends (usually 25% to 40% whiskey, the rest neutral spirits). The second shows how much aging whiskey the distillers withdrew to produce these blends and straights. The difference between these withdrawals and current production determines whether stocks increase or decrease in any given year.

Naturally, the more straight whiskey you bottle, the faster you use up your stocks of aging whiskey. Before the war, the ratio of straights to blends was high. But during the war, when distillers could make little or no whiskey, they had to stretch their dwindling supplies. So they stopped bottling straights, switched to blends.

• **More Straights**—It wasn't until very recently that the trend away from straights finally reversed itself. For the fiscal year ended in mid-1950, blends accounted for 77.1% of the total, as against 85.6% the year before. Straights meanwhile had climbed from 8.9% to 15.1%, bonded whiskies from 5.5% to 7.8%.

At last year's rate of consumption, current whiskey stocks can last eight years and three months. And if distillers had to stretch this out, they could—by going more heavily into blends.

There is no indication, however, that this is going to happen in the near future. Publicker Industries, for example, in announcing an expanded budget for newspaper and magazine advertising, says that it will put "the major part of the expanded program" behind its straight bourbons (Old Hickory, County Fair, Charter Oak).

• **Can It Last?**—For the long run, the outlook is somewhat uncertain.

This month and next, distillers will deliver a total of 10-million gal. of industrial alcohol to the Office of Rubber Reserve of the Reconstruction Finance Corp. This alcohol is needed to supply reactivated synthetic rubber plants until Jan. 1, 1951. At that point a 10-million-gal. shipment of industrial alcohol—first part of a 114-million-gal. order—is due in from France. This should get U. S. distilling industry off the hook.

On paper the plan looks good. But there is a big question mark: Can France deliver all the alcohol it has contracted to sell? The distillers don't happen to think so.

• **Convert or Import**—Unless foreign producers can supply alcohol for synthetic rubber, the beverage alcohol distillers will have to convert, at least partially, to industrial alcohol production. How much they'll have to convert depends on how far and how fast rearmament goes.

Not all synthetic rubber facilities use alcohol; the ones that were operating before Korea use petroleum. To reactivate the standby alcohol, users on a full-scale production base would take about 230-million gal. of industrial alcohol a year. Existing industrial alcohol facilities could probably step up output enough to supply 100-million gal. of this. But that would still leave the synthetic rubber plants scratching for another 130-million gal.—from either the beverage distillers or from overseas.

So far, the demand for alcohol from the liquor industry has been solely for the rubber program. A stepped-up program for jet fuels, guided missiles, and smokeless powder would require more alcohol. The whiskey makers would be asked to supply it.

• **Capacity**—During World War II, beverage distilling facilities were converted 100% to war alcohol output. From October, 1942, through June, 1945, they operated almost continuously around the clock. They produced 793-million gal. of alcohol, or about 25-million gal. a month.

Thus, to get that 10-million gal. for ORS—or an average of 5-million gal. a month for November and December—the distillers will tie up about 20% of their theoretical capacity.

• **Emergency Steps**—The demand for alcohol for rubber hardly came as a sur-

prise to the distillers. As soon as they knew we would rearm, they knew they were in for it. So right after Korea broke out, they began stockpiling whiskey madly (BW–Sep.23'50,p36). Normal summer whiskey production is about 5-million gal. a month. But this July they doubled that; in August they tripled it. And they have been going full blast since then.

Meanwhile, they boosted output of neutral spirits to 15.3-million gal. in August—four times the rate in August, 1949. As of Aug. 30, stocks of neutral spirits came to almost 60-million proof gal., about nine or 10 months' supply at the present rate of consumption.

• **More, Please**—Even though no distillers switch back to blends in the near future, you can be sure the possibility will be in the back of their heads.

For one thing, liquor consumption is very apt to rise in the next year or so. This would follow naturally from the coming boom in the soft-goods market (BW–Oct.28'50,p36). If consumption does increase, distillers might be faced earlier than they had thought with the problem of when to cut down the drain on whiskey stocks.

Rearmament Upsets Marketing Data

Marketing men who rely on government data in their work can expect some major changes in their source material. Some of the statistics they have been using regularly will become a rearmament casualty.

• **Personnel Shift**—The casualties result from the shifting of Commerce Dept. personnel over to the new National Production Authority. This affects two groups of publications.

• The quarterly industry reports put out by the Office of Industry & Commerce. The pulp and paper, construction, and container and packaging reports will still appear. But those on rubber, fats and oils, sugar-coffee-teaspices, canned fruits and vegetables, leather, chemicals, and lumber are out.

• Many of the studies formerly put together by the Marketing Division of Commerce. These include distribution cost analyses, efficiency studies in retailing and wholesaling, pricing practices of manufacturers, and all market analyses for sales-promotion purposes.

By way of compensation for these losses, however, marketing men will be able to lay their hands on a wealth of material pouring out of NPA. When you distribute scarce materials by fiat, you have to tell people just how much there is to distribute, who gets it, and why. This means that some valuable source material on production and distribution is on the way.

HOW TAPE HELPS INDUSTRY SAVE TIME, CUT COSTS...



FREE BOOKLET SHOWS HOW TAPE CAN HELP IN YOUR BUSINESS

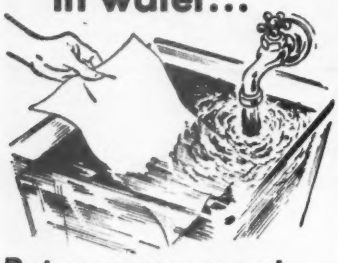


Whatever your business, chances are you'll find the facts, figures, and pictures in this 12-page booklet will help you cut costs! Just drop a note—on your business letterhead, please—to Dept. 67, at the address below for your copy.

PERMACEL offers a complete line of tapes—each one *laboratory-developed*, carefully tested under toughest conditions for tensile strength, adhesion, stretch.

Permacel®
INDUSTRIAL TAPES
INDUSTRIAL TAPE CORPORATION • NEW BRUNSWICK, N. J.

Soak it in water...



Patapar comes out strong!

Soak Patapar in water—slosh it around—boil it. Patapar comes out glistening and strong.

Give it the grease test...



Patapar resists penetration!

Spread grease or oil on Patapar. Then turn the sheet over. It's clean. No penetration.

Patapar Vegetable Parchment's qualities of wet-strength and resistance to grease are helping solve problems for business men in many fields. As a packaging material Patapar is wonderful for protecting products like butter, bacon, margarine, fish, cheese, poultry. It is used for milk and cream can gaskets, ham boiler liners, pie doilies and in hundreds of other ways.

Because Patapar is called upon to fill so many different needs it is produced in 179 different types. The types vary as to wet-strength, grease-proofness, moisture vapor resistance, opaqueness, thickness and other characteristics depending upon the need.

BUSINESS MEN:
With your future needs in mind, write on your business letterhead for booklet, "The Story of Patapar."

Patapar
HI-WET-STRENGTH GREASE-RESISTING PARCHMENT
Paterson Parchment Paper Company
Bristol, Pennsylvania
West Coast Plant: 340 Bryant St., San Francisco 7
Sales Offices: New York, Chicago
Headquarters for Vegetable Parchment since 1885

Grocer's Bid in Wholesaling

Grocer-owned wholesaler in Los Angeles does $120-million business supplying 1,400 stores in southern California. Discounts from quantity buying are passed on to members.

Grocers as a whole have always been skeptical of cooperative ventures. Here and there the grocer-owned wholesaling movement has been able to strike deep roots. But it has never had the widespread popularity of the so-called voluntary chains that are organized and controlled by private wholesaling houses.

• **Exception**—However, Certified Grocers of California, Ltd., is a striking exception.

The success of Certified Grocers is strictly a Los Angeles story. It probably couldn't have happened anywhere else in the U. S. It took two vital elements to produce it: the unusual character of Los Angeles food retailing and the phenomenal growth of the city's population.

Just five years ago, Certified was doing an annual business of about $35-million. This year, its officials estimated last week, it will do better than $120-million. In all, the Los Angeles grocer-owned food wholesaler is now:

A major national factor in food wholesaling. Its present volume of business puts Certified in the top rank of grocery wholesalers of all types. It is perhaps second to giant Consolidated Grocers Corp., which is generally recognized as No. 1 U. S. wholesaler, doing a gross business of $150.3-million during the fiscal year ending June 30, 1950.

The dominant local element in food retailing. Some 1,400 groceries in southern California buy all or part of their supplies from Certified. These grocers do 49% of all the retail food business in the 11 counties around Los Angeles—overshadowing even the business done by the Safeway Stores chain in its home territory.

• **Super Start**—To understand Certified's career, remember that Los Angeles was the seedbed of the supermarket. Begat by depression, the supermarket adapted itself admirably to the Los Angeles atmosphere, growing and multiplying as the city mushroomed. Then the corporate chains moved in with supermarkets of their own. The battle was on.

Soon the independents found they needed some aid against the mass-buying of the chains. At the same time, the very nature of the supermarket demanded superwholesaling.

• **Rapid Growth**—So Los Angeles supermarkets began teaming up with Certified. They built it up, and Certified in turn strengthened their hand against the chains. Today, Safeway, with 199 stores, is the only national chain really entrenched in Los Angeles. A&P has a mere 36 stores in the area—not much alongside Certified's biggest member, Thrifty Mart, with its 64 stores.

Certified began small. It started in 1923 with 40 members. Three years later, volume was only about $300,000 annually. Then in 1931 it climbed to $5-million, to $22-million four years later. Certified's general manager, Campbell Stewart, attributes this partly to inflation. But a rush of new members has also been a major factor.

Because of its control over a sizable chunk of the southern California grocery market, Certified is able to get tremendous quantity discounts from its suppliers. It is the largest single customer of such firms as California & Hawaiian Sugar and California Packing Corp. (Calpak).

• **Capitalization**—Certified is set up as a nonprofit corporation, wholly owned by its 1,100 retail members. The members buy 10 shares of stock at $20 each and put up $50 besides in a revolving fund to buy the stock of members who drop out. They elect a board of 15 directors, who appoint the general manager and other salaried personnel. Members get only one vote, no matter how many stores they own.

To provide additional working capital, Certified requires each member to deposit cash equal to two weeks' purchases. This also prevents defaulting. All business is on a cash basis. Members buy one week, pay the next.

There's no obligation for members to buy all their supplies from Certified. The cooperative takes the view that if it can't do a better buying job than anyone else, members should buy elsewhere. Some do, but mainly because their customers demand specialty items not carried by Certified.

• **No Milk, No Meat**—Certified stocks only packaged, canned, and bottled goods. Some grocer-owned cooperatives carry meat. Certified finesses this, as it does bakery and dairy items. Yet it handles frozen foods ($5-million worth last year) and some private-brand lines (dried beans, rice).

For the most part, however, Certified's stock-in-trade is locally or nationally accepted brands. It will handle only fast-moving stock. A buying committee from member stores passes on all new items, reviews doubtful ones.

• **Members Get Breaks**—Certified's streamlined operation permits minimum



The chemists could tell you a thing or two about Stainless Steel

YOU don't have to be connected with the process industries to know that many details of chemical processing are vital and closely-held secrets. But it's no secret that a very large share of this production, whether hush-hush or not, is conducted in equipment made of stainless steel—for the excellent reason that stainless steel is the *one* material that best meets the need for great strength and high resistance to corrosion, heat and wear.

Put it this way: Allegheny Metal equipment gets the call because stainless steel lasts longer, looks better, cleans easier and quicker, maintains top purity standards and holds maintenance and depreciation costs down to the bottom.

That's why Allegheny Metal is a highly essential material, especially in time of national need. We've spent (and are spending) many millions of dollars to increase our production, but it is still necessary to make every ton of stainless steel go as far as possible. ● Let our engineers help you *to use* Allegheny Metal and other alloy steels to the best advantage.

* * * * *

Complete technical and fabricating data—engineering help, too—are yours for the asking from Allegheny Ludlum Steel Corporation, Pittsburgh, Pa. . . . the nation's leading producer of stainless steel in all forms. Branch Offices are located in principal cities, coast to coast, and Warehouse Stocks of Allegheny Stainless Steel are carried by all Joseph T. Ryerson & Son, Inc. plants.

WSD 9388

You can make it **BETTER** with

Allegheny Metal

AL
TIME-TESTED STAINLESS STEEL





markups. The cost to members is figured on this formula: After deducting quantity discounts, Certified tots up its dead net cost. Then it adds operating markup. Anything over that is returned to the stores, who get their patronage dividends every six months. The rebates this half are going to be "very substantial," says general manager Stewart.

Certified does its best to keep its members ahead of competition. When price advances are in the offing, Certified buys heavily, gets as much into inventory as it can. Then it can sell at the old price for a longer time. When prices drop, Certified absorbs the loss, billing members at the new, low price. Certified's prices are the same to all members, big or small.

Certified also buys equipment for members at substantial discounts.

Certified has no sales staff—only a field development crew that services the members. If a packer or a processor wants to boost sales, he has to get out and do it himself. Certified does not want to take on these costs. Certified's members get a simplified price list three times a week, mark their orders on it, mail it back. Certified's staff punches IBM cards directly from the list; IBM machines handle invoicing and accounting.

• **Broadening Field**—Certified's operation is typical of the methods that have built up the whole field of grocer-owned cooperative wholesaling. Today, according to Food Marketing, a symposium to be published shortly by McGraw-Hill Book Co., there are 237 wholesaler cooperatives serving 40,000 member units. Over this setup is superimposed National Retailer-Owned Grocers, whose membership includes some 100 of the wholesalers (among them Certified). NROG functions in the same way as do the centralized buying offices of the major food chains.

NROG is owned by its member wholesalers. Founded 16 years ago, the cooperative has had a slow, steady growth—except during the war years, when it closed its membership list. Today, the group's members serve 25,000 retail stores. And there's a waiting list of groups that want to join up.

NROG releases no sales figures. But according to one estimate, the grocers served by NROG's West Coast branch—Pacific Mercantile Co.—did $14-billion worth of business last year.

• **Bigger and Bigger**—Certified is so big, however, that it actually makes little use of Pacific Mercantile's services. And Certified is still growing. It has just broken ground for another addition to its present 400,000-sq.-ft. warehouse. This is the third expansion since the company moved to its new $2-million, 30-acre headquarters in Los Angeles three years ago.

MARKETING BRIEFS



Bypassing Regulation W: Some dealers are making capital of the fact that veterans who use cars mainly for business aren't subject to the usual credit restrictions. Under the GI Bill of Rights, such veterans get easier terms. But there's a catch: The Veterans' Administration must guarantee the loans in whole or part.

•

American Woolen Co. has invoked the labor-escalator clause in its sales contracts. A percentage of the price increase caused by a recent rise in wages will be applied progressively to goods shipped from Nov. 1 through Nov. 28. After that, the total rise—10¢ to 20¢ a yard—will be applied.

•

National advertising volume in first nine months of this year was up 9%, according to a Printer's Ink survey. September volume was up 15% over the same month last year.

•

Zenith's Phonevision test (BW—Oct. 14'50,p90) has been postponed again, this time until Dec. 1. It's the same old trouble: Hollywood won't cooperate by turning over films.

•

Bigelow-Sanford's modernization will up manufacturing capacity and product-research facilities. The three-year program will take about $3-million a year.

•

The shower-curtain business of the National Carbon Division of Union Carbide & Carbon Corp. was sold to Joseph A. Kaplan & Sons, New York, exclusive manufacturer of Koroseal shower curtains. National Carbon wants to free more facilities for production of its Eveready dry batteries.

•

Beer sales fell off nearly 2% in the fiscal year ended June, 1950, the U. S. Brewers Foundation says. The number of breweries dropped, too—from 440 in 1949 to 407.

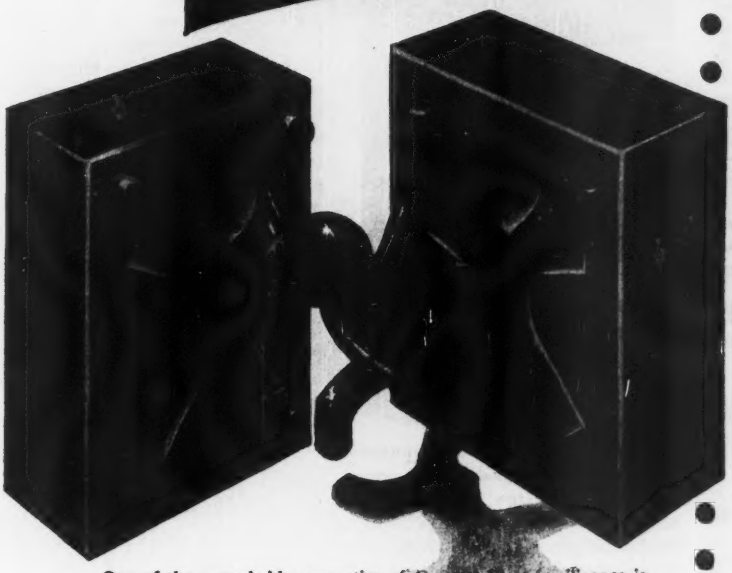
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Marketing costs are being studied by the National Assn. of Cost Accountants. It is surveying major companies to see what methods they use for "evaluating products, sales territories, and customer classifications." NACA's report will be released early next year.

The second in a new series of advertisements designed to tell the G-E Silicone Story to industry.

HOW YOU PROFIT FROM G-E SILICONES'

Better Release from Sticking



One of the remarkable properties of General Electric silicones is *release*—an amazing ability to keep things from sticking. This characteristic makes G-E silicone emulsions, greases, oils, and resins important to industry as release agents of many sorts.

For example, gaskets on railroad car couplings are kept from sticking when coated with a thin film of silicone oil. Food products won't stick to belts or pans treated with silicone resins. Flatirons won't stick to starched fabrics, after being rubbed lightly over a silicone-impregnated pad.

Where is *sticking* a problem in *your* business?



SPEED PRODUCTION OF RUBBER PRODUCTS

General Electric silicone emulsions speed production, cut rejects, and reduce operating expenses when used as mold release agents in the rubber industry. G-E silicone mold release compounds are also useful in die-casting applications.



HELP BAKE BETTER BREAD

By treating baking pans with General Electric's new silicone coating—Dri-Bake®—bakers can increase production schedules. Easy release for as many as two hundred bakes (without re-treating) is possible with this clean, greaseless, non-smoking release agent. ®Reg. U. S. Pat. Off.

HOW CAN YOU PROFIT FROM G-E SILICONES?

If you can improve your product or manufacturing process by a unique and highly-efficient release agent, investigate G-E silicones! Remember too, that G-E silicones resist heat and cold to a remarkable degree; they are chemically inert; they provide many useful surface characteristics. For more information, write to Section F3, Chemical Department, General Electric Company, Pittsfield, Mass. (In Canada: Canadian General Electric Co., Ltd., Toronto.)

GENERAL ELECTRIC

ACTUAL *Materials-Handling* NEEDS OF DESIGN of CLARK'S *NEW*

ONE Basic Design

TWO Power Types

- *battery power, electric-motor drive*
- *gas power, hydraulic-motor drive*

MOTOR IN THE DRIVE WHEEL
—a compact, fully-enclosed drive unit with power delivered to the wheel direct from the motor shaft.

SHORTEST TURNING RADIUS
Shortest wheelbase of all hand trucks.

MORE POWER!—and automatic power-reserve to meet peak requirements.

GREATEST UNDERCLEARANCE
to prevent "hanging up."

REDUCED WEAR on rubber and floor because larger (14") drive tire carries greater portion of the load.

●

DESIGNED FOR ITS JOB

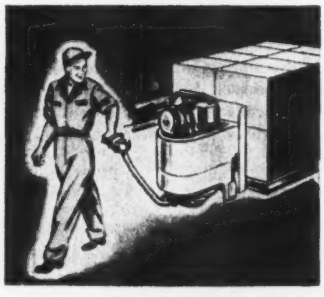
There's nothing new about powered hand trucks as such—but there's a great deal that's new and exceedingly important about the models that Clark is introducing.

For a good many years Clark contemplated the addition of powered hand trucks to its expanding line of fork-lift trucks, industrial towing tractors and special attachments designed to meet particular handling



needs. It has been no part of Clark's plan to produce simply "another competitive truck." Rather, the guiding purpose has been clear and very much to the point: *To build the best powered hand trucks on the market.*

Step No. 1 in that development was to *determine industry's wants;* and then to design *a machine to satisfy those wants.* To achieve its goal, Clark drew upon its wealth of practical experience in the field of materials handling, and its unique



engineering knowledge gained during 35 years of specialized service to Industry in the broad field of power transmission.

A DEFINITE JOB TO DO

That the powered hand truck has a place in modern materials handling never was questioned. It was clear that in many small installations, such trucks perform more effectively and more economically than any other type of equipment. It was equally clear that the comprehensive, efficient, low-cost handling systems in large installations must employ hand trucks along with fork-lift trucks and towing tractors.

On that thoroughly sound basis, Clark took all the time needed to produce machines that satisfy its own uncompromising standards of excellence—knowing that no standards could be more exacting.

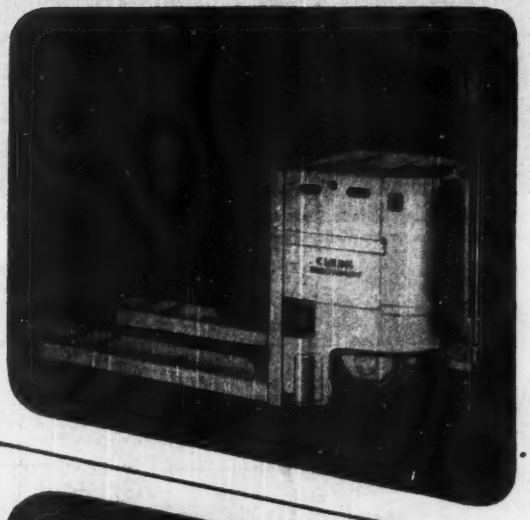
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"CLARK PRESENTS . . ."

Today, with great pride and supreme confidence, Clark presents these revolutionary additions to its Leadership Line: The new Clark Powered Hand Trucks—one basic design with two types of drive, to satisfy every requirement. Clark gives unqualified assurance that you will find in these new machines the same engineering integrity, the same economy of operation, the same rugged durability and extraordinary capacity for work that have established the Clark Line as the perennial first choice of a great majority of leading industries. This superior capacity for work is doubly important now that Industry is called upon once more for peak production with depleted manpower.



LEADING INDUSTRIES DICTATED THE POWERED HAND TRUCKS



1 ELECTRO-LIFT

★ New-type compound motor develops *more power* than any other electric hand truck

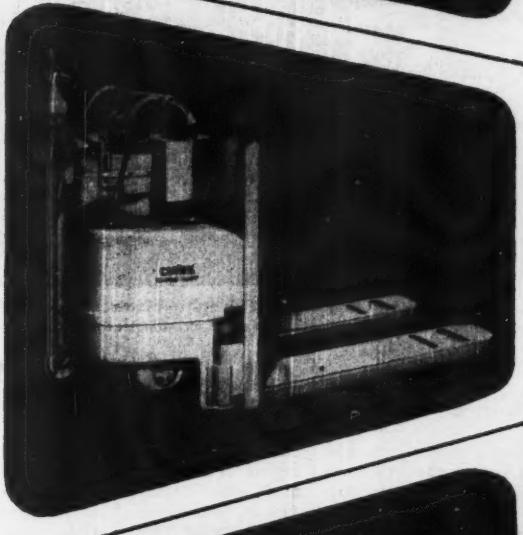
★ Economical use of power means longer work periods

★ Automatic acceleration prevents abuse, provides smooth, fast "getaway"

★ Speed variations so slight, loaded or unloaded, that operator fatigue is reduced

★ Soft, dynamic braking protects loads

★ *The only* short truck with space for batteries up to and including 19-plate



2 HYDRO-LIFT

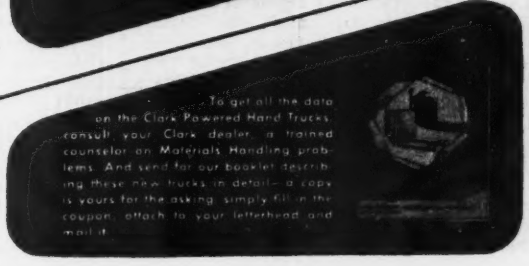
★ Heavy-duty, vane-type hydraulic units for continuous efficiency and long life—a variable-displacement pump driving a constant-displacement motor

★ 24-hour ramp service every day!

★ Automatic torque multiplication assures ample reserve power when needed

★ Gas-powered hydraulic-motor drive unequaled for smoothness and controllability

★ Effortless finger-tip positioning of directional controls



To get all the data on the Clark Powered Hand Trucks, consult your Clark dealer, a trained counselor on Materials Handling problems. And send for our booklet describing these new trucks in detail—a copy is yours for the asking simply fill in the coupon, attach to your letterhead and mail it.

CLARK ELECTRIC AND GAS POWERED FORK TRUCKS

AND POWERED HAND TRUCKS • INDUSTRIAL TOWING TRACTORS



INDUSTRIAL TRUCK DIVISION • CLARK EQUIPMENT COMPANY • BATTLE CREEK 42, MICH.

Please send New Powered Hand Truck Book.

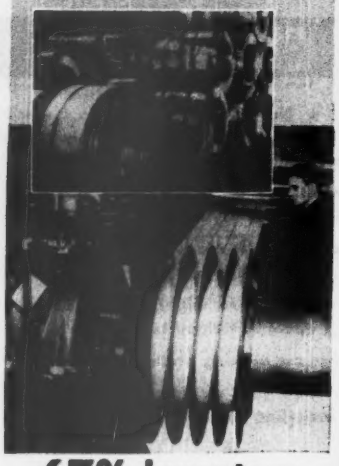
Name_____

Firm Name_____

Street_____

City_____ Zone____ State_____

YODER
ROTARY GANG
SLITTERS



67% Inventory Reduction!

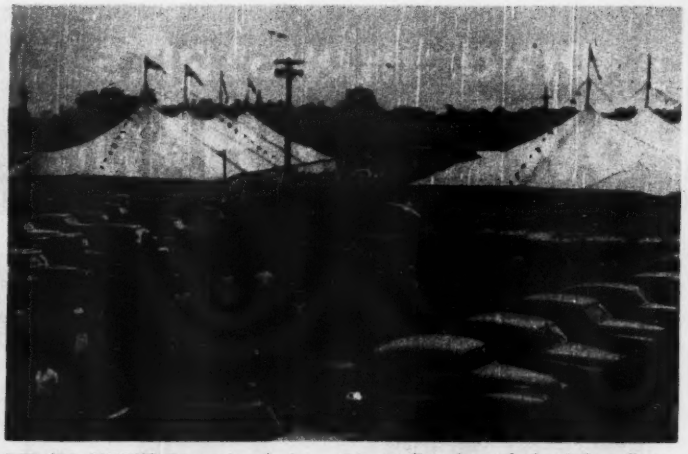
Users of Coiled Strip and Sheets are able to reduce inventories by as much as 50% to 67% by doing their own slitting. One manufacturer reports that he formerly had to carry in stock 1,500,000 lbs. of strip, in 700 different gauges and widths. After installing a Yoder slitter, he was able to reduce this to 500,000 lbs., consisting of only 13 basic sizes, from which the 700 different items are now slit as needed.

Still more important: Direct savings in slitting cost on requirements as low as 1000 tons per year are usually sufficient to pay for the slitter in a year or two. This tonnage may be slit by operating the slitter only from two to four days per month.

For more complete information, send for 76-page book on the economics of doing your own slitting and equipment required.

THE YODER COMPANY
5530 Walworth Avenue • Cleveland 2, Ohio

COLD FORMING
YODER
SLITTING AND
TUBE MILL MACHINERY



IT'S NO CIRCUS, but serious business, this traveling show of electrical appliances. Through it, people in rural Tennessee Valley learn what electricity can do for them.



TALKING KITCHEN gives its own demonstration. A hydraulic system—complicated as a B-29's, says Crosley—opens oven and cabinet doors while recordings explain the gadgets.

TVA Tent Show Sells

A million-dollar electric road show struck tents last week in the little town of Centre, Ala., and called it a day. Centre was the 51st and last road stop for the Tennessee Valley Public Power Assn.'s big—and little—tops. This joint effort of government and industry to sell the idea of electric power to Tennessee Valley counted itself a success.

For six months the Home & Farm Electrical Exposition had toured smaller communities and rural areas in four states. Primarily, the caravan was on the trail of the more than 300,000 new rural users of electric power in the TVA region. It had played to record crowds; in all, some 350,000 homeowners, homemakers, and farmers saw it. Average attendance of 7,000 per show was so good that TVPPA is already talking of a repeat performance in 1951.

Main sponsor was TVPPA, an organization of municipal and rural cooperative electric systems that distribute TVA power. Important cooperators were electrical-appliance manufacturers, distributors and dealers, and TVA itself. Manufacturers and power distributors



PUPPET SHOW joins with refrigerators and stoves to lure crowd to Philco display.



SOMETHING FREE interests the womenfolk at the Kelvinator exhibit.

Appliances

were the ones who put up the money.

One of the two big tents put on regular stage shows, with appliance manufacturers and TVA supplying the actors and props. The other main tent housed displays of electrical appliances by manufacturers and local dealers.

Outside was a midway, with an electrified farm as the big feature. Down each side of the midway were huge trailers showing off electrical wares.

Exhibitors went all out to pull the crowds in. General Electric's "Junior," a walking-talking refrigerator, said,



Excellent idea! You see, the Bank of Montreal through its branch managers—whether in remote mining towns or teeming industrial centers—can investigate business opportunities right on the spot.

Consequently, with over 550 branch managers across Canada, the B of M can furnish the answers on manufacturing space or plant sites, labor, transportation, market potentials—in short, just about all the key information you *must* have for your industry to capitalize on Canadian Opportunity.

For the fastest action, contact any U. S. office or the Business Development Department, Bank of Montreal, Place d'Armes, Montreal.

"MY BANK" TO A MILLION CANADIANS
B of M

BANK OF MONTREAL
Canada's First Bank Coast-to-Coast

New York---64 Wall Street Chicago---27 S. La Salle Street San Francisco---333 California Street

Head Office: Montreal

550 BRANCHES ACROSS CANADA • RESOURCES EXCEED $2,000,000,000

Just see how it sells



COOPERATION. Manufacturers are interested in sales. Dealers are interested in *local* sales. Elgin takes advantage of these facts by making panels easily available to dealers. And they've found that cooperation *outdoors* makes everyone happy! General Outdoor Advertising Co., 515 S. Loomis St., Chicago 7, Illinois.

1925 Silver Anniversary Year 1950

*Covers 1400 leading cities and towns



skylines ...by Otis



Honolulu sends the cheery greeting, "Okolemaluna!" Hawaiian for 'bottoms up!' Yet, the Paradise City is more than a playland. It's the industrial and commercial center of the Hawaiian Islands. Watch Hawaii! In fifty years, this once sleepy Island Paradise has become the crossroads of the Pacific. It's the world's greatest single source of pineapple and cane sugar; an $18,000,000-a-year tourist attraction; and a thriving region of 600,000 people. 94% are English-speaking. Most are American citizens. All are ambitious to make the Territory of Hawaii the 49th State of the Union. Otis has long been a citizen of Hawaii and a friendly adviser to the business men who are building its modern skyline.

NEW! THE OTIS FREE-FLOW ESCALATOR. A MORE LUXURIOUS WAY OF MOVING MORE PEOPLE AT A SURPRISINGLY LOW PRICE.* ALL OF OUR 263 OFFICES HAVE THE DETAILS.

*Lower Than Prewar





A TOUCH OF EXCITEMENT

Signaling for an elevator is no longer a push-the-button-and-wait routine. It's an exciting, and somewhat mystifying, experience with the new Otis electronic *touch* button. Nothing moves. A mere *touch* of a finger lights the directional arrow.

ALWAYS IN ITS INFANCY

An elevator installation need never grow old. Otis maintenance—*at a money-saving flat monthly service charge*—keeps elevators doing the job they were built to do and extends their life by 50%.



Otis **ELEVATOR COMPANY**

Home Office: 260 11th Ave., New York 1, N. Y.

"Have a lollypop"; Crosley had a kitchen that talked; General Motors showed its "Previews of Progress." A hillbilly band and an organ (Hammond was one of the exhibitors) supplied sound effects for lighter moments.

Retailers See Sales Leveling Off Some

Last week, two top retailers took a look at the department store outlook for the next few months, came up with pretty much the same conclusions: Business is going to be good, but the terrific gains will level off some.

• **Readjustment**—B. Earl Puckett, chairman of the board of Allied Stores Corp., told the New York Society of Security Analysts that the Korean sales boom is definitely over. Retailing is now going into a period of "readjustment." He warned that sales may lag somewhat through the holidays and on into the first few months of 1951. All in all, he looks for about a 7% increase in fourth-quarter sales over the same period last year.

At the Federated Department Stores' annual spring planning meeting, president Fred Lazarus, Jr., said that "sales increase will be small between now and July, 1951." Higher personal income and corporation taxes and the slowdown of housing, automobile, and appliance employment will all contribute to keeping consumer buying down.

• **Orders Slacken**—Right now, Lazarus says, there's a lull in retailers' orders to manufacturers. Goods bought in anticipation of slow delivery and possible shortages during the summer months are now reaching the retailers. So they're taking a second look at inventories and slowing down new orders.

Lazarus feels that "this slowdown in new orders will help squeeze out speculative price increases that had developed in department store markets."

Other phases of Federated's thinking:

• Revised terms of Regulation W are biting into appliance sales, will continue to take their toll during the first half of 1951. With credit restrictions on housing, sales of furniture, TV, and other major appliances will drop about 5%.

• Prices of men's spring clothing will be up. But men's suits made of rayon and other synthetic fabrics will sell well.

• Prices will be up some over a year ago, but not so much as wholesale and manufacturing levels would indicate.

• More credit controls on hard-goods lines not yet covered, or on soft goods, would have a "very serious effect on sales."



. . . a coordinated group insurance plan for Business and Industry . . . developed by

CONNECTICUT GENERAL

LIFE INSURANCE COMPANY

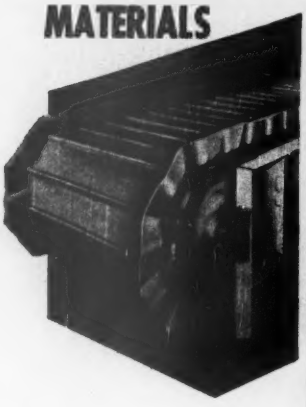
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COMMODITIES



STEEL CAN PICK UP these marbles. They are iron-ore pellets from taconite, turned out by a special experimental machine set up at the University of Minnesota.

Taconite Will Be Ready When—

Steel companies continue work on beneficiation of low-grade magnetic ores. They'll be ready for big-scale production whenever the direct shipping supply runs low.

As soon as the American people want socialism, Jimmy Walker used to say, either the Democrats or the Republicans will have it in their platform.

That goes for taconite iron ore, too, a steel executive said this week. When the direct-shipping ore from Minnesota runs low, the steel companies will have the low-grade taconite all ready to help fill the gap.

• **New Interest**—Right now, the war-born clamor for more, more, more steel is intensifying interest in taconite. Three major steel combines are working on pilot plants for the beneficiation of the low-grade magnetic ore—that means getting it into a form usable in blast furnaces. At least one of them has well-advanced plans for big-scale production. And all three seem to have licked most of the problems of beneficiation.

In Washington, where government planners have talked about boosting steel production to 125-million tons a year or more, taconite has been getting a big play. It has been a pet project of the Interior Dept.; big government loans were mentioned to get the necessary plant set up.

In the last couple of weeks, this talk has quieted down. Somebody in authority pointed out that the government had only so much money to lend to a lot of priority claimants.

• **On Their Own**—There's another angle to the U. S. loans. Some insiders say that the three groups interested

in taconite wouldn't touch government money with a 10-ft. pole. They want to do their own developing in their own good time, and they have plenty of cash to do it.

The time seems far rather than near for any big-scale use of taconite. There's at least a 10-year supply of high-grade ore left in the Mesabi mines. By the time that is used up, huge deposits in Labrador, northern Quebec, and Venezuela will be available. Taconite's role will probably be to supplement the imported ores. The latter, it is said, will be competitive with taconite as far west as Pittsburgh. But not all companies have direct access to the overseas ores; that means a likely market for taconite.

It's on this long-term, long-view basis that the three steel groups are working on taconite.

• **Largest Project**—The largest current project is that of Reserve Mining Co., which was recently purchased half by Republic Steel and half by Armco (BW —Sep.23'50,p92). Reserve Mining has leased from Mesabi Iron Co. the mining rights on the largest magnetic taconite field in the Great Lakes area. The field contains a known 1.5-billion tons of ore, which would yield 500-million tons of treated ore.

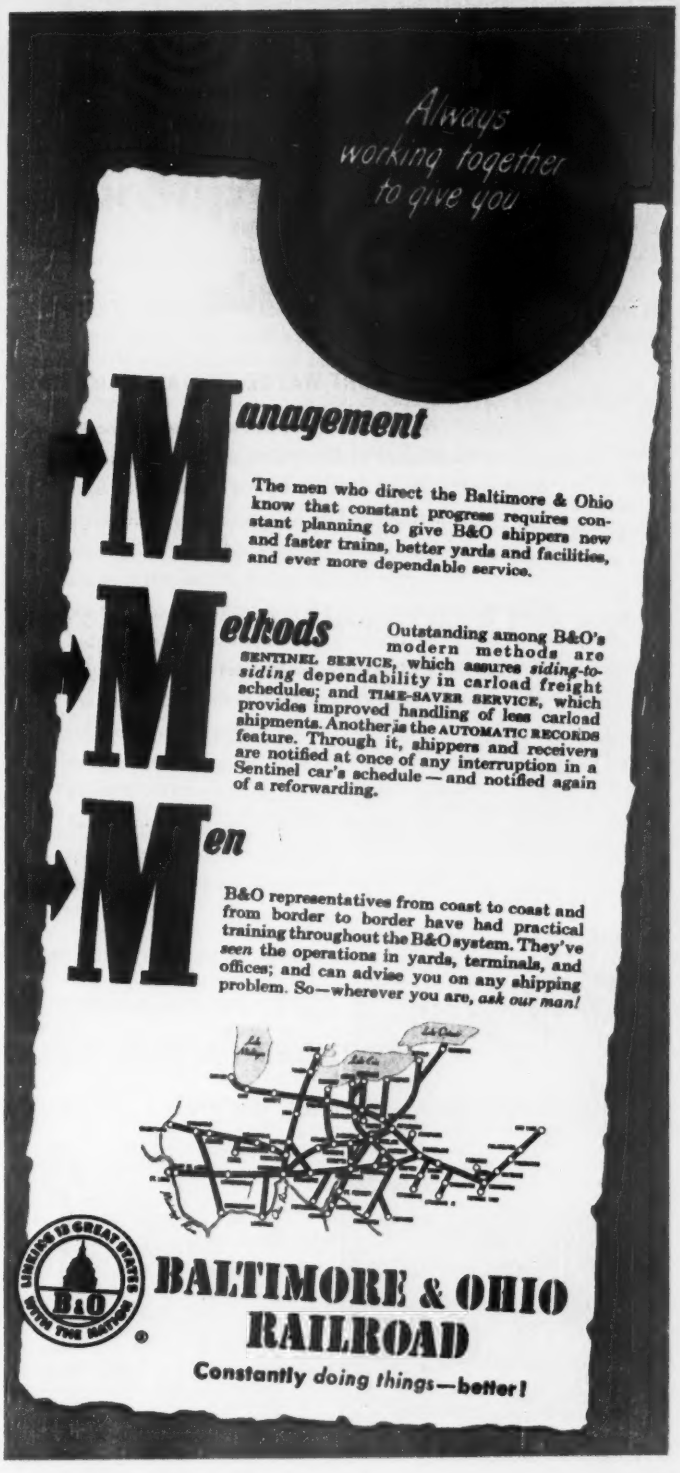
Twenty years ago, Mesabi Iron built a plant at Babbitt, Minn., for the beneficiation of taconite. The plant never came anywhere near its planned 1-million-ton production, and during the war the machinery was sold. Now, Reserve Mining is using the old building to set up a beneficiation plant with a 300,000-ton-a-year capacity. The company can get plenty of trained personnel from Republic's operation in upper New York State.

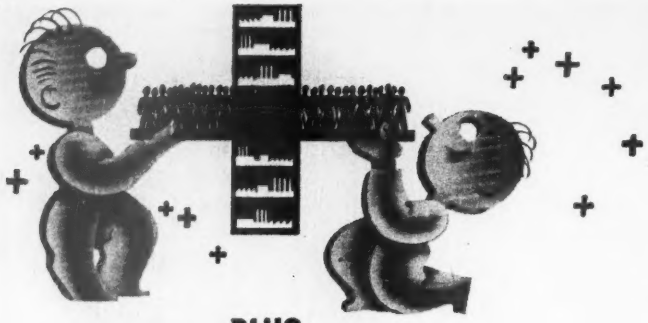
• **New Setup**—On top of the Babbitt plant, Reserve Mining is also planning an entirely new setup that will eventually have a 10-million-ton capacity. The company is going to spend $60-million to get the first of four 2.5-million-ton units under way. The other units will be built later, at an estimated cost of $100-million.

Before Reserve Mining was sold to Republic and Armco, its manager—Oglebay-Norton—had been casting about in Washington for government money to help finance this project. However, the new owners have shown no interest in such financing.

• **Furthest Along**—Reserve Mining has the biggest current projects, but Erie Mining Co. is actually the furthest along. Erie is owned by Interlake Iron, Bethlehem Steel, Youngstown Sheet and Tube, and Pickands Mather, with the latter doing the managing.

For two years, Erie has been operating a taconite plant in Minnesota on an experimental basis. The plant, which has a capacity of 200,000 tons, has been





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turning out satisfactory ore pellets with an iron content of over 60%, compared with the average 50% found in Mesabi direct-shipping ores.

Production costs at the Erie plant have been commercially prohibitive, but the industry admits that this is meaningless. Should production be raised to serious levels, the costs would promptly plummet.

However, Erie has no immediate plans for such expansion. It intends to continue at the present rate, perfecting its methods, and testing the taconite pellets produced at Interlake's blast furnace in Duluth. Pellets will also be used to enrich other ores at down-lake plants.

• **Big Steel**—U. S. Steel has also announced an entry in the taconite sweepstakes. Oliver Iron Mining Co.—a Big Steel subsidiary—is setting up a taconite beneficiation project at Virginia, Minn. (BW—Mar.18'50,p26). The 1-million-ton plant will be used at first for processing ordinary ores, will shift later to taconite. U. S. Steel, incidentally, is in a stronger position on direct-shipping ores than much of the industry

The general opinion in the industry today is that a taconite plant turning out 2.5-million tons a year would be able to compete commercially with direct-shipping ore. It already takes scratching to get direct-shipping ore with a 50% iron content; processed taconite should run from 62% to 67%.

Cotton Stew

Cottonseed and linters hit new price records. The 1950 crop of cotton is short. And demand for byproducts is heavy.

This year's short cotton crop—some 9,869,000 bales—isn't worrying the cotton textile men too much; there's a nice 6¼-million-bale carryover to turn.

But carryover cotton doesn't help the linter and cottonseed supply, and that's where the short crop hurts (BW—Oct.7'50,p10).

• **Record Prices**—Record prices for both linters and seed reflect the tightness in these byproducts.

First cuts of cotton linters in the Carolina area are bringing 20¢ to 20½¢ per lb.; second cuts, 15¢ to 15½¢.

Cottonseed in that area is bringing $110 per ton, basis grade, carlots, f.o.b. cotton gins. The World War II peak was $98. About a year ago, the government was buying seed to support prices. Early this cotton-picking season, seed was quoted at only $65 to $75 per ton.

• **Who Wants Them**—Cottonseed oil is in big demand for margarine, short-



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J. F. Ryan Company	*Billings, Montana*
Badham Insulation Co., Inc.	*Birmingham, Ala.*
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John C. Reeves & Co.	*Denver, Colorado*
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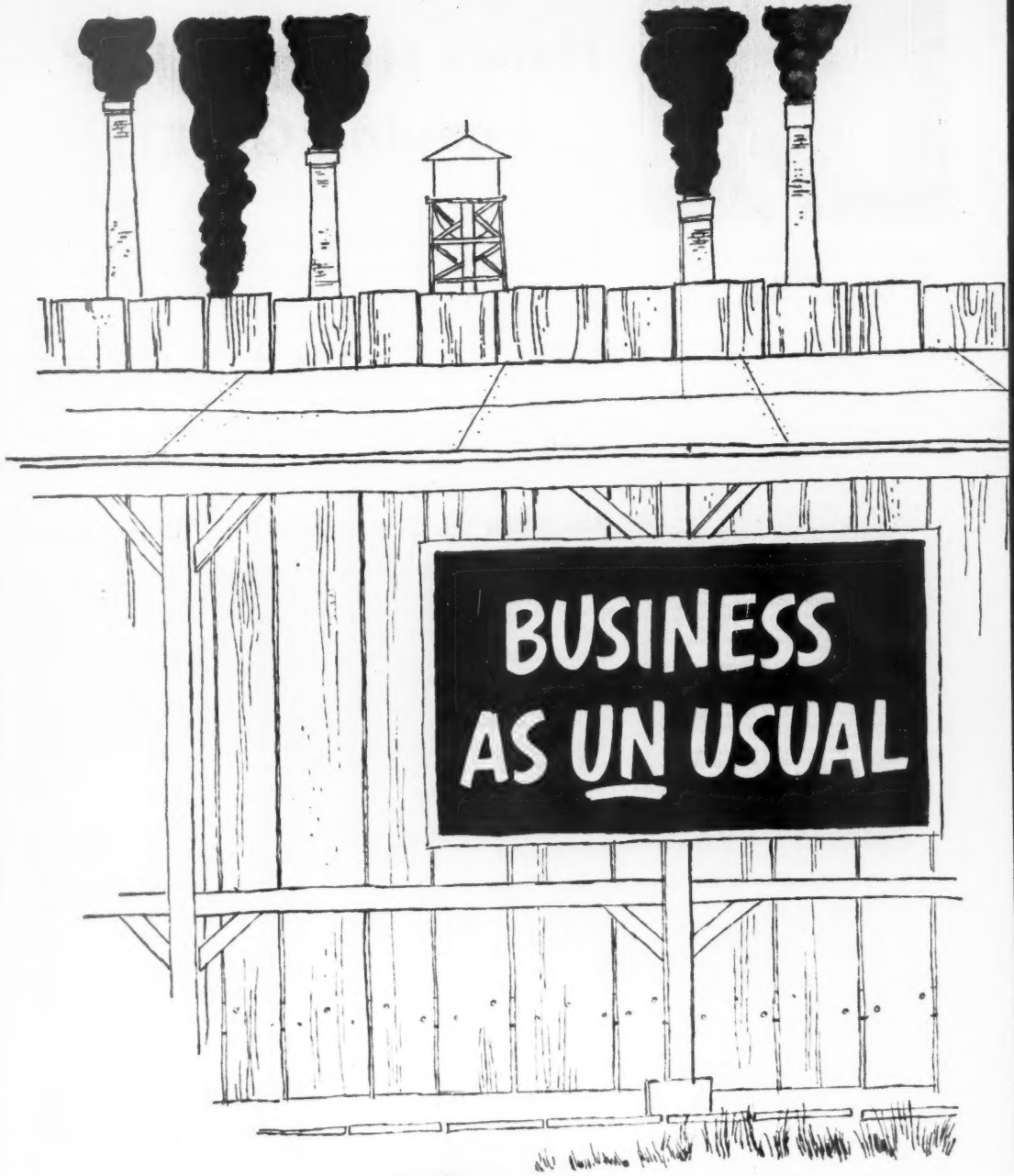
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REACH MEN IN RESTRICTED AREAS. Intensified needs for scientific and technological exploration draws a curtain of secrecy over the work of thousands upon thousands of top-flight men. Many plants and laboratories will be inaccessible to salesmen. But not to business magazines.

SUPPLEMENT SALESMEN'S CALLS. Where personal selling is curtailed for man power or economic reasons, business paper advertising will stretch a depleted staff over the gap.

REACH NEW AND EXPANDED PLANTS. Companies with a government green light may be unfamiliar with suppliers, or with parts and equipment for making new products. Many are priority buyers. Business magazines reach priority audiences.

KEEP YOUR PRODUCT STORY BEFORE ALL YOUR PROSPECTS. Distributors, jobbers, retailers, buying influences within a plant. Oversold or not, reaching these men is good selling for today, good insurance for tomorrow.

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ACID WEARS WELL, UNDERFOOT. Chrome tanning makes leather for shoe soles tough and long-wearing. Muriatic Acid, HCl from Tennessee is used for tanning. It's also an economical, analytical reagent, is used widely in dye manufacturing, bleaching, electroplating, pickling, photography and in metallurgy. For your chemical needs write to—

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enings, and other household uses. At New York, cotton oil futures gained 3.54¢ during the month of October; they went from 19.31¢ to 22.85¢. And they're still going strong.

All this will give another boost to the prices of milk and beef. For, as the raw seed goes up, cottonseed meal (made from what's left after the oil is extracted) goes up. And the rough hulls make up highly important livestock feed.

Cotton linters are the fuzz that's left on the seed after the cotton itself is ginned off. Rayon-yarn producers want linters badly for their cellulose content. And, of course, manufacturers of TNT are after the stuff in a big way. The combined military and civilian demand puts the total sky high.

The pinch shows up in other products, too. Rayon wood pulp prices jumped about $10 per ton recently; Carolina pulp wood price went up $2.50 per cord.

• **Wastes Up, Too**—Meanwhile, prices of spinnable cotton wastes are booming. When Washington limited exports of raw cotton (BW—Oct.14'50,p10), it didn't include spinnable waste from cotton textile mills. So export demand for card strips and combers—top-quality spinnable wastes—drove prices to new records. In fact, comber is bringing as much as raw cotton of some grades; spot raw cotton in Charlotte, N. C., was 40½¢ per lb., basis middling 15/16-in. staple on Oct. 31.

Chasing Rubber

New York importers say no to Singapore offer to buy back contracts. Russia's getting too much Malayan rubber, they say.

War creates strange paradoxes. Last week, for instance, Singapore rubber dealers were doing their darnedest to buy rubber in New York.

• **What Happened**—Some months back, these Singapore dealers had sold contracts for November and December delivery in New York, at the then-going prices for those deliveries. Now they're anxious to buy back those contracts on rubber not yet shipped from Malaya. And even though prices for deliveries today are way above prices when the contracts were sold, the dealers offered to pay a premium over present prices. To top it off, their offer has been declined.

• **Russia Bound?**—One New York importer said he had good reasons for turning thumbs down. The Singapore dealers want to sell the stuff to the Russians, he said. He had heard that for four months agents for the Russians and

Ask

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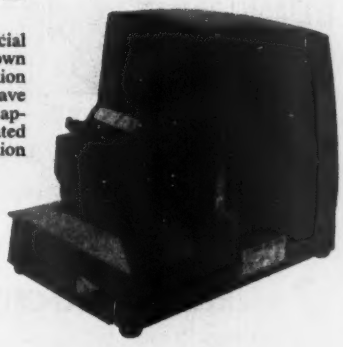
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their satellites have been buying up tin, manganese, and rubber in Southwest Asia, paying for it in gold, and doing their best to outbid the U.S.

Of course, nobody really knows what the Kremlin is up to. But there's some evidence that the rubber importers' theory makes sense. For one thing, rubber prices in Singapore have soared above even the sky-high New York levels, taking freight into account. That's why the Singapore dealers could afford to make their New York offer.

For another, official statistics show that Russia is taking more Malayan rubber now than it did before Korea. Out of 76,600 tons of crude exported from Malaya in June, only 4,448 tons went to Russia and 496 to Poland, Czechoslovakia, and China combined. But in July, Russian takings nearly tripled, to 12,175 tons, while shipments to the three satellites rose to 1,055. And August takings by Iron Curtain countries held at about the July level. Furthermore, shipments to Hong Kong rose from 3,522 tons in June to 6,642 in August—and nobody knows where rubber consigned to Hong Kong is really headed for.

Corn Stocks Big; Brannan Wants More

When is a surplus a deficit? When you wipe it out with a swish of the pen, is one answer. And you might do that if you're in, or preparing for, a war.

• **More Than Prewar**—That's pretty much the situation in corn. We have what, by past definitions, is a big surplus. We are harvesting a 1950 crop of more than 3.1-billion bu., the fourth-largest on record. We have left over from previous years, some 859-million bu. That 4-billion bu. total is one-fourth more than we ever had in a single year before the war.

When corn is added to other feed crops, an estimated 155-million tons is available for the 1950-51 season. That should be enough for rising livestock numbers, with 25-million tons to spare.

• **But More Is Wanted**—In the face of the statistics, Agriculture Secretary Charles Brannan has just announced that he will "ease" planning curbs for 1951. That is to encourage hog raisers to expand their 1951 programs by assuring them plenty of feed.

Corn was under acreage controls this year. Presumably it will be again next year, because Congress has written a formula which calls for such-and-such controls when supply reaches such-and-such levels. But the formula is modified, in any given year, by the Ag Secretary's ideas of the coming season's needs. That's how Brannan is permitted to let down the bars for 1951.

PRODUCTION



1 Intricast is Thompson Products' name for precision casting with mercury. It starts with filling steel mold with liquid mercury.



2 After freezing, mercury is removed from mold. Solid chunk reproduces contours and finish of eventual cast-metal part.



3 Mercury patterns are assembled by slight pressure that "welds" them to rod. These are patterns for turbine blades.



4 A series of dips in different slurries gradually builds up a ceramic mold or coating around the frozen patterns.

Iced Mercury Opens Fields for Casting

In the next few months, production men will find their lives growing increasingly complicated. As rearmament orders mount, they will be called on to produce more and more complex parts—many of them from hard-to-machine alloys.

Such orders will call for quantity production. Some of the parts will have unusual contours and sharp edges. Others may be hollow, or fitted with internal walls. Many will have extremely critical dimensional tolerances.

Industry can go about making these parts in several ways: It can machine out the piece; it can forge it, roll it, or form it to shape; it can make the part by powder metallurgy; or it can use the lost-wax precision-casting method. All these have advantages and disadvantages, from both a cost and production standpoint.

• **Addition**—This week at Thompson Products, Inc., Cleveland, a relatively

For **LOBSTERS** MAINE is a natural



For **LUMBERING** OREGON is a natural



but for a NATURAL location for

successful manufacturing

it's **PATERSON, N. J.**

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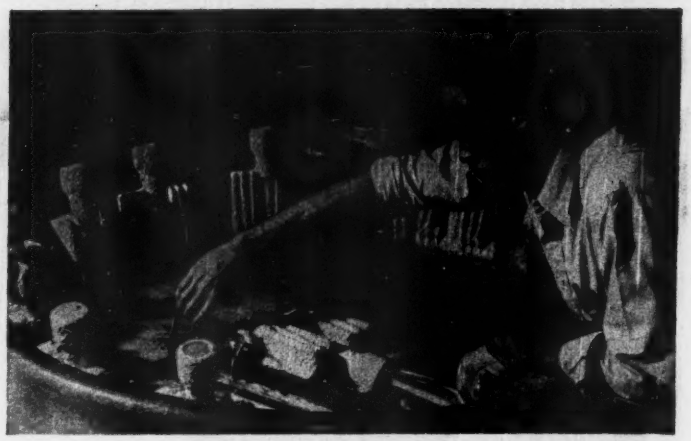


PATERSON INDUSTRIAL COMMISSION

JOSEPH M. ZIMEL, Executive Secretary

CITY HALL, PATERSON, N. J.

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5 After the ceramic has hardened into a mold, frozen mercury is melted out by spraying patterns with room-temperature mercury. Melted-out mercury is recovered and reused.



6 Molds, after baking, are filled with melted metal to form finished parts.



7 Ceramic is chipped off, freeing metal parts. Only one machining is needed.

new parts-making process was establishing itself in the production family. Called Mercast, it is the patented property of Mercast Corp., New York. Thompson's Metallurgical Products Division, which makes use of the process in mass-producing very complex turbine parts, has its own trade name for it—Intricast.

Intricast is precision casting with frozen mercury. As such, it is a variation on a process that, according to legend, is hundreds of years old. It is only in the last 10 years, however, that significant industrial progress has been made with the technique (BW—May 15'48,p64).

• **The Process**—In ordinary precision casting, you cast a wax or plastic master pattern of a part. The pattern is then surrounded with an "investment" of ceramic material that hardens into a mold. After you melt out the pattern, you fill the hollow mold with metal. When the metal solidifies, the ceramic investment is chipped off. No machining is necessary, other than removal of the sprue (channel) through which the metal was fed.

Precision casting, of course, isn't quite so simple in practice. Allowance must be made for shrinkage of the pattern, and the pattern material must be carefully selected. Generally, production involves large masses of investing material and these have to be painstakingly compounded and applied. Then, too, it's extremely hard to do precision casting

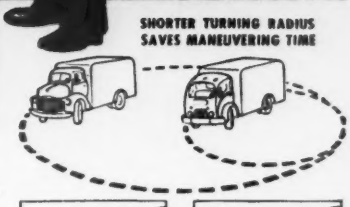


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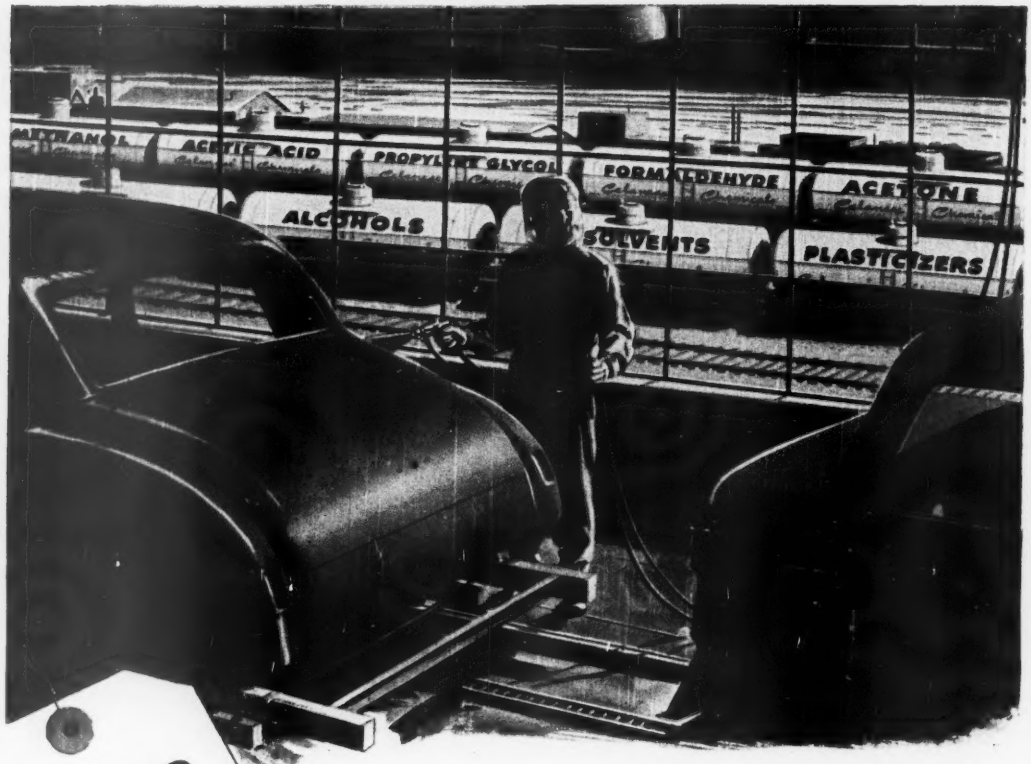






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of hollow parts that have complicated interior surfaces.

• **Improvement**—Thompson, by using frozen mercury patterns, has been able to get around many of these difficulties. The patterns, along with improved ceramic investment materials and a dipping technique, have made possible (1) more intricate shapes; (2) thin sections and sharp edges; (3) superior surface finish; (4) better dimensional accuracy. Also, large-size castings can be made with the technique using a wide range of alloys.

• **Mercury Steps**—Roughly, the process is this: A metal die, made to the precise contours of the finished part, is filled with mercury. The die is then submerged in an acetone bath held at a temperature of —135F. The mercury freezes, leaving a complete mercury part that is an exact replica of the eventual metal piece.

This frozen piece is then lifted out of the die with dental-type instruments. Next, it is attached to a frozen mercury sprue (the sprue will form a channel to carry the metal that builds up the final part). Several of the frozen mercury parts or patterns can be attached to a single sprue to make what engineers call a Christmas tree. Slight pressure "touch-welds" the patterns to any other frozen-mercury surface, such as the sprue.

• **Baths**—The frozen Christmas tree is then dipped in a series of ceramic slurries to build up a coating approximately ¼ in. thick. This is a marked saving over the amount of investment that is necessary for wax or plastic precision casting.

The mercury process requires between eight to 12 dips in cold nonaqueous ceramic slurries containing a fluorine compound. The compound evaporates at low temperatures as the coating hardens. Hence, the mercury patterns remain frozen. The slurries vary; the first, which is the finest, determines the finish of the part after it is cast.

One notable advantage of the Thompson technique is that casting gases can escape through the relatively thin, permeable ceramic.

• **Cooling and Baking**—After the mold or coating is hard, the mercury is melted out by spraying room-temperature mercury against the frozen mercury in the pattern. This provides controlled melting and prevents freeze-ups and the blocking of mold passages. It also guards against sudden expansion of the frozen mercury that might crack the mold. The melted-out mercury is recovered and reused.

After firing for about three hours at 1850F, the mold is ready for the actual casting of the metal. Metal is melted at controlled rates in induction furnaces. About 70 castings—each consisting of a number of patterns—are poured from each heat.

Thompson has successfully applied the mercury process to hollow turbine blades that have two internal ribs running the length of the blade. There is no other economical way to turn out such unusual castings on a production basis. Thompson feels this is just one example of how mercury casting will open new fields for design engineers. It will make possible any number of intricate shapes that couldn't be attempted before.

• **Materials and Costs**—All castable alloys—from aluminum to the high-temperature cobalt types—have been handled with the mercury process. Dimensional tolerances of plus or minus 0.002 in. to plus or minus 0.005 in. have been maintained in the finished part. Right now, Thompson has equipment to turn out 20-lb. stainless-steel castings and its experts foresee castings twice that weight as practicable in the near future.

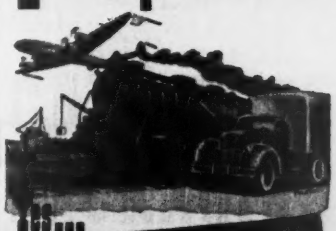
Although the process requires more equipment than wax and plastics casting, labor costs run about the same. And Thompson finds that it saves in other ways. Scrap is reduced to an absolute minimum; high rates of production can be attained; finish grinding and machining are to a very large extent eliminated; rejects are few and far between.

• **One of Three**—Thompson got into frozen mercury casting several years ago. (Right now, only two other companies in the country are working with frozen mercury: Sperry Corp. and Precision Castings Co.) Kenneth M. Bartlett, Thompson's director of research, sparked the first company research on the process. After a year or so of experimental work under license from Mercast Corp., the company set up its Metallurgical Products Division—on a unique organization plan.

The director of research, Bartlett, became division manager. The chief chemist, M. S. Roush, was named factory manager. The group leader of ceramic research, R. A. Kempe, became sales engineer. The idea behind this organization chart was to get people who knew the process into the commercial handling of the technique. That not only broadened their industrial knowledge, but it made certain the commercial version of the research process was set up on a sound basis for new business.

• **New Fields**—Bartlett, the division manager, says that his department is now working on other new processes, as well as Intricast. The division is commercially producing large quantities of powdered-metal parts. And research now under way will lead into activities such as plastic molding of metal powders and the making of high-temperature materials, including metal and metal-compounds.

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DEPARTMENT of COMMERCE
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The Guaranty Survey

Published Monthly by

Guaranty Trust Company of New York

October 27, 1950—Vol. XXX, No. 7

—From the latest issue of THE GUARANTY SURVEY, *monthly review of business and economic conditions published by the Guaranty Trust Company of New York. The complete issue is available on request to our Main Office, 140 Broadway, New York 15, N. Y.*

Who Are Today's "Liberals"?

Why should a bank publication devoted to what it considers to be sound economic thinking be concerned with the meaning of a word or the use of a political label? The answer is simple. It is because practical politics, including the use of political labels, affects the climate of public opinion, and that climate has a vital significance to the well-being of American business and the livelihoods of 150,000,000 American citizens. It is because we believe many self-styled liberals of today actually advocate some of the very principles and practices which genuine liberalism was formed to combat, and in doing so threaten not only the political rights but also the economic welfare of free men.

What is a liberal, in the historic and genuine meaning of the word? The term is derived from the Latin word meaning free. It was adopted in the nineteenth century by forward-looking political parties in Great Britain and elsewhere that stood for freedom from blind adherence to tradition, freedom from narrowness in ideas, freedom of thought and speech, freedom from undue repression of the individual by the group, or of the minority by the majority. True liberalism stresses the importance of the free exercise of individual initiative as a source of progress and the duty of the state to promote the conditions in which individual initiative can thrive. In politics it stands for strictly defined and *limited* governmental powers, equality under the law, and the rule of law as contrasted with the rule of men. In the business field it means freedom of enterprise, opportunity, and competition.

Most exponents of welfare statism denounce totalitarianism; yet they advocate a course of expansion of governmental powers and attrition of individual freedoms that tends in that very direction. It cannot be otherwise, for when the state undertakes to define welfare and force its citizens into the prescribed paths deemed necessary to promote it, this can be done only by the exercise of powers not possessed by a government based on truly liberal principles.

The real reactionaries of today are those who, under the shibboleth of welfare, would purposely or unknowingly lead a free-governing people backward in the direction of authoritarianism.

Guaranty Trust Company of New York

Capital Funds, $375,000,000

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Paper-Wall Plant

Chrysler builds a plant with bonded aluminum-paper panels. It developed the process to bond brake linings to brake shoes.

During the war, Chrysler Corp. developed a process for bonding wood or metal to a resinous material. It used this process, called Cyclewelding, to cement brake linings to brake shoes (BW–Mar.13'48,p61). Today, the company is using the same process to build itself a new factory in Indianapolis.

• **Aluminum Sandwich**—The walls of Chrysler's new factory will be made up of about 60,000 sq. ft. of Cycleweld panels. The panels are 2 in. thick, 4 ft. wide, and 12 ft. long, and they look like a sandwich somebody sat on. The "meat" is honeycombed kraft paper impregnated with a phenolic resin. The "bread" is aluminum sheet.

The aluminum sheet is bonded to the paper fill under heat and pressure. The result is a very light, strong panel that requires little maintenance. It is rustproof, and, because the surfaces are aluminum, it needs no paint.

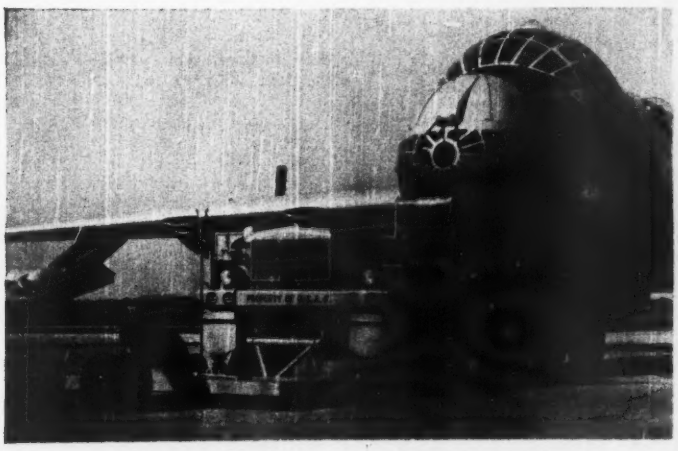
• **Experiments**—Chrysler began experimenting with Cycleweld building panels back in 1948. The company tested them in portable arctic shelters that were built for the Army in Alaska. Then it tried out the panels in a Chrysler warehouse in Highland Park, Mich., and in an experimental home northeast of Detroit. The company liked the results and decided to use the panels on a big and nonexperimental scale in its Indianapolis plant.

Except for an 8½-ft.-wide window strip and a 4-ft. layer of brick at the groundline, the entire walls of the new factory will be Cycleweld paneling. (The panels are not wide or strong enough to support the whole weight of the walls and windows at the groundline, so brick is used there.)

• **Ready by Summer**—Chrysler says that it expects to have its new factory all ready for operation by the summer of 1951.

New Propellers Seek 1,000-Mph. Air Speeds

Speeds up to 1,000 mph. with prop-driven aircraft may eventually be possible with a new series of subsonic, transsonic, and supersonic propellers now being made by Curtiss-Wright Corp., Caldwell, N. J. Initially, the propellers will be used in aircraft for



Airport Tractor Hauls 14 Times Its Weight

This stubby tractor, dwarfed beneath the nose of a B-36 bomber, hauls 14 times its own weight in airplanes. Powering the tractor is a 190-hp. GM diesel engine that can pull up to 200 tons.

The tractor, called A-2, was developed by the Air Materiel Command's Equipment Laboratory. It is manufactured by Cleveland's Euclid Road Machinery Co. According to AMC, A-2 can go forward, backward, or sideways. Dual controls allow the driver to face in either direction. For visibility, the operator cab has a hydraulic device that raises it 20 in. above the tractor top.

To prevent damaging an airplane's landing gear, A-2 has an Allison hydraulic torque converter transmission that gives smooth starts under a heavy load. When the tractor is hauling in the winter (down to approximately –65F), sand-dispensers provide traction to combat snow and ice. The A-2's winch has a 70,000-lb. capacity.



Hyster, manufacturer of famous fork lift trucks,

CUTS COST OF PACKAGING with Angier VPI* Wrap



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"Overseas air or parcel post shipments are completely protected by VPI", says Hyster. "During wet winter months, when there is a variance in temperature, many domestic shipments are VPI protected. Parts are merely wrapped in Angier VPI. No special packaging technique is necessary. This saves time and expense in packaging parts."

Why not cut the cost of *your* export and domestic packaging? Send coupon today to

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INCREASE PRODUCTIVENESS, THIS A. B. C. WAY

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A system of addressing helps cut order-shipping time from several days to a few hours!

Is paperwork somewhere cumbersome, costly? Falling short in smoothing and speeding the performance of business functions? Break it down. Apply work simplification's *scientific method* to each element of the record system.

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B. Simplify the writing method. Typist prepares 1500 Farmers Cooperative stock certificates a day (against 700) with the aid of AUTOMATIC LINE FINDER. (PS. 19)

C. Design the most efficient form. Eastern Air Lines designed 3 labor-saving continuous forms to help mechanize control over employee passes. (PS. 19)

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KANT-SLIP continuous forms

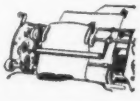


Feeding-aligning devices: THE REGISTRATOR PLATEN



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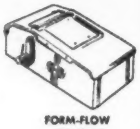
DUAL FEED

Registers 2 different forms for 1 continuous typing operation



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Sign, date, number, trim, tear off, stack Kant-Slip forms



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Better records . . . by hand



UNIT ZIPSET FORMS

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cruising at 500 to 600 miles per hour.

Curtiss-Wright, which produces more than three-quarters of all propellers for engines of 3,000 hp. or above, calls the new models the "Turboelectric" series. They are designed for use with turboprop engines in the 2,500-5,000, 5,000-7,500, 7,500-10,000, 10,000-20,000 hp. ranges.

• **Tests**—Models of the Turboelectric propellers are now on test by the Air Materiel Command of the Air Force at Wright-Patterson Air Force Base. Among the first military uses will be on the turboprop version of the long-range Douglas C-124 troop- and cargo-carrying transport.

Single and dual-contrarotating types are included in the series, the number of blades varying with the engine and aircraft. Single-rotation subsonic and transsonic models are three or four bladed. Dual-contrarotating models have six or eight blades arranged in two rows of three or four each. The blades are of steel, are approximately rectangular in shape, have square tips.

PRODUCTION BRIEFS

Tungsten and molybdenum output is slated for a $390,000 expansion at Fansteel Metallurgical Corp. Additional ore-treating and metals-processing equipment will boost the firm's production to 260% of its original capacity.

•

Radiation-detection instruments of 180 different types are made by 84 U. S. firms, according to Atomic Energy Commission's second annual Radiation Instrument Catalog (Dept. of Commerce's Office of Technical Services). AEC estimates this year's gross sales of the industry will reach $8-million.

•

Fiberglas pipe for field distribution of petroleum is getting a tryout at Army Engineer Research & Development Laboratories, Ft. Belvoir, Va. Its advantages are lightness and resistance to corrosion.

•

Minneapolis-Honeywell Regulator Co. is touring the nation with an exhibit of its electronic and pneumatic recording, indicating, and controlling devices. The road show of 38 working models will hit 60 major cities for inspection by industrialists, architects, engineers.

•

An electronic relay system in the Pacific Northwest will be turned on by Western Union Telegraph Co. this month. It's the 16th of a nationwide network. The $2-million system connects a customer's wire directly to a Western Union station in a distant city, eliminates the retransmission of a message by intermediate operators.

NEW SUSPENSION BRIDGE ACROSS PUGET SOUND WITH SNOW-CLAD MT. RAINIER AS BACKDROP



TACOMA NARROWS BRIDGE—Engineering and design by Washington State Toll Bridge Authority, C. E. Andrew, chief consulting engineer; Bethlehem Pacific Coast Steel Corporation furnished and erected the towers and superstructure; and John A. Roebling's Sons Company of California were the cable contractors.

A huge new suspension bridge across Puget Sound has now been opened to traffic. It's the Tacoma Narrows Bridge, bringing the scenic grandeur and thriving communities of the Olympic Peninsula much closer to Tacoma and Seattle. The air view above, taken with telephoto lens, shows the bridge in the foreground, while in the background loom the snow-covered slopes of Mt. Rainier, 50 miles distant. The bridge has four lanes and is slightly over a mile long. Its suspended span of 2800 feet is the third longest in the country.

Engineers encountered formidable design and construction problems in building the Tacoma Narrows Bridge, for it spans a channel with swift tidal currents and water as deep as 280 feet. Another factor with which the engineers had to contend is the high winds that often sweep through the Narrows. In working out the design, they made a number of laboratory tests with scale models at wind velocities ranging up to 100 miles per hour.

The 16,000 tons of steelwork in the Tacoma Narrows Bridge was furnished and erected by Bethlehem Pacific Coast Steel Corporation, Bethlehem's Pacific Coast subsidiary. This is the latest addition to the long roll of monumental bridges built by Bethlehem, including the Golden Gate Bridge at San Francisco; the George Washington Bridge across the Hudson at New York City; the Ambassador Bridge at Detroit, and the Rainbow Bridge spanning the Niagara River at Niagara Falls.

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FOR MODERN SELLING AND TRAINING



Not one . . . not two . . . but three new Victor models in a simultaneous debut! Each of these three Victor triumphs incorporates the latest advancements in 16mm design based upon 40 years of experience in the production and development of precision equipment.

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PLUS! — Twelve new mechanical advancements for greater operating convenience.

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VICTOR **ESCORT**
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VICTOR LITE-WEIGHT, Sr.
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NEW PRODUCTS



Portable Conveyor Simplifies Loading

Wilkie Co.'s portable Telescopic Conveyor, fitted with a special deflector, simplifies the automatic loading of trucks and freight cars. The deflector sets up at any point along the length of a permanent conveyor belt, turns cartons onto the Telescopic Conveyor placed at right angles to the main conveyor belt.

The Telescopic Conveyor comes in 5-ft., 7½-ft. and 10-ft. lengths, extends to 20-ft., 30-ft., and 40-ft. lengths, respectively. It has adjustable legs to fit varying heights, carries cartons automatically when set on a slope. The Conveyor has horizontal roller wheels, and the deflector has wheels on its curved-steel side. Cartons coming down a conveyor belt from a plant hit the curved deflector, turn the corner with sides against the roller wheels.

• *Source: Wilkie Co., 5520 Arch St., Philadelphia 39.*

• *Price: $400-600 for deflector-conveyor combination (according to lengths and widths).*

Resins for Paint

Paints, based on Epon resins (Epon is a trade name), have greater adhesion, chemical resistance, and flexibility, says Shell Chemical Corp.

The resins, developed jointly by Shell and Devoe & Raynolds Co., come in four grades. Each resin-paint combination has the three general characteristics of adhesion, chemical resistance, flexibility. But each stresses one of those characteristics more heavily than the others.

You can apply resin-paints without

a primer coating on rough wood and metal surfaces. Drums, cans, and caps coated with these paints don't contaminate foods and beverages during shipment and storage. Other uses for resin paints: on aluminum and steel awnings, floors, tool boxes, household appliances.

Epon resins can be formulated in paints in unmodified form, or in combination with various fatty acids.

• *Source: Shell Chemical Corp., Houston, Tex.*

• *Price: 47½¢-57¢ a lb. (to paint manufacturers).*

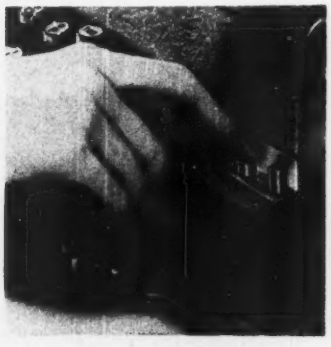
Prefab Boiler

Babcock & Wilcox has added a shop-assembled boiler to its series of Integral-Furnace Boilers. Called Type FM, the newcomer was developed to reduce the cost and time of installation. It comes ready to place, hook up, and operate.

The boiler is shipped as a unit, can be set on a concrete floor or concrete blocks, and be moved from one place to another within a plant. It has a push-button control for starting and stopping. And you can fire it with oil or gas, or a combination of both.

Type FM is available in standard sizes with loads ranging from 7,000 lb. to 25,000 lb. of steam an hour, at pressures up to 250 psi.

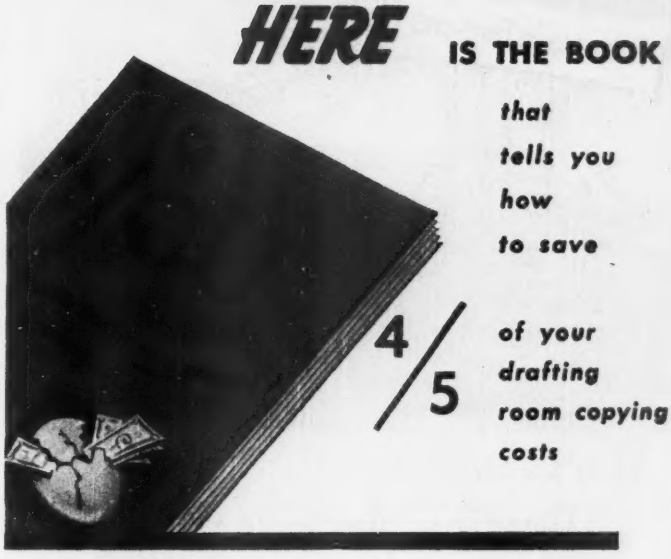
• *Source: Babcock & Wilcox Co., 85 Liberty St., New York City 6.*



Line-Setting Typer

When you type out copy on a Vari-Typer, you have to rule in lines separately. Ralph C. Coxhead Corp. now has an attachment for its Vari-Typer that makes single, double, or dotted lines at the press of a button. This means you can set copy, rule lines in the same operation.

The small attachment fits on the right side of the Vari-Typer, next to the keyboard. To inscribe a line, you set the length with marginal keys, press a key to indicate the type of line



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(ruled or dotted). Then, with the carriage fixed at the left margin, you hold down the button (picture, page 95) while the machine makes a line of the desired length.

For slow ruling or dotting, you press the righthand button on the attachment. To print vertical lines, you insert paper sideways.

• *Source: Ralph C. Coxhead Corp., 720 Frelinghuysen Ave., Newark 5, N. J.*

• *Price: $1,950 for Vari-Typer, $185 for attachment (works only on new model Vari-Typers, at present).*

Filter Purifies Fumes

Exhaust gases and dust contaminate the air in factories, often injure workers. R. C. Mahon Co.'s Fog Filter is one answer to the problems. The filter is a steel-alloy tower that scrubs contaminated air with high-pressure water.

As the air shoots in at the top of the tower, nozzles wet it and swirl it around at high speeds. The wetted impurities hit the inside wall of the tower, drain out at the bottom. The clean air rushes into a small cylinder, set inside the tower, and escapes at the top.

Fog Filter cleans out contaminants of less than five microns in size, handles polluted gases up to 800F. Mahon uses water because it's cheap. But other chemicals can be employed to clean particular gases. The cost of Fog Filter depends on the gases or dusts it is supposed to clean, since special linings inside the tower are needed for special jobs.

• *Source: R. C. Mahon Co., Detroit 34, Mich.*

Simplified Trailer Axle

American Steel Foundries has an axle unit for towed trailers that's simple in design, easy to install. ASF says it also keeps loads level because both sides go down equally whenever a load is off-center.

The unit consists of a forged-steel axle with a curved section at each end to which the wheels attach. The trailer body is supported on brackets (it takes only four bolts to attach the trailer body to the brackets). The brackets fasten to spiral (helical) springs, which, in turn, wrap around the axle. The spiral springs "deflect" by tightening or relaxing as the truck travels. They eliminate the conventional leaf-spring assembly that is more complicated to install.

The ASF-Linco axle is an adaptation of the Linco axle.

• *Source: American Steel Foundries, 410 N. Michigan Ave., Chicago 11.*

• *Price: $20 to distributors for axle with 2,000-lb. rated capacity (other sizes available).*

NEW PRODUCTS BRIEFS

A sun lamp that weighs only 10 oz. and fits in your pocket is sold by Cooper-Hewitt Electric Co., Hoboken, N. J. It retails for $27.50.

•

Removing glaze from baking utensils takes only 8 min. and a temperature of 125F when you use a silicone-converting tank made by Detrex Corp., Detroit 32.

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ABC Impregnating Varnish for electrical units reportedly resists oils, won't crack at temperatures as low as −70F. It's made by Frederick S. Bacon Laboratories, Watertown, Mass.

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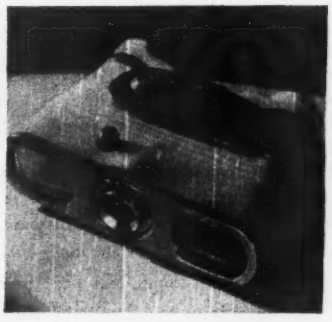
A house-insulating fiber, called Silvawool, is made of chips of Douglas fir. It is supposed to insulate as thoroughly as rock wool and glass wool, resists moisture, fire, and insects. The manufacturer is Weyerhaeuser Timber Co., Longview, Wash.

•

See-set margins help in centering headings and balancing short, medium, or long letters. They are now available on Underwood Corp.'s standard typewriters.

•

An Electron drill, made by Elox Corp. of Michigan, 740 N. Rochester Rd., Clawson, Mich., is supposed to be speedy and versatile. It cuts hardened steel fast, drills holes at any angle, repairs or alters molds and dies.



Photos While You Look

If you like what you're seeing through this binocular, you can take it down on film. Inside the binocular is a 16 mm. camera. The binocular has a 2.5 magnification; the F4.5 camera has shutter speeds of 1/25, 1/50, and 1/100 sec. Called the Binoca, the unit fits into a pocket or purse, retails for $32.95. It's distributed by Random Corp., 415 Lexington Ave., New York City.



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EXECUTIVE OPINION



"Any man . . . who starts at . . . 40 to prevent or at least retard the degenerating diseases of later life has a very good chance of doing so."

GERIATRICS EXPERT ANSWERS:

Can Businessmen Lick Old Age?

Dr. Dutchess says that depends on how they behave after 40. With care in living habits, they can slow down or prevent degenerative diseases, function successfully a long time.

Old age hits everybody sooner or later. But often it hits the businessmen sooner. The degenerative diseases that accompany it, such as coronary troubles, are the executive's deadly enemy.

To find out what medical science has discovered about these diseases, and how far it can go in curing or preventing them, BUSINESS WEEK interviewed Dr. Charles E. Dutchess, medical director of Schenley Laboratories, Inc. The study of the maladies of old age, or geriatrics, is of deep interest to Schenley; the company is a prime producer of penicillin and streptomycin, as well as other drug products that may be used in the diseases' treatment. The recorded interview follows:

BW: Is it correct to assume, in a sense, that geriatrics is a search for means of prolonging life?

DUTCHESS: Yes, in that it is a study of the aging process and the degenerative diseases that go with it, and research to develop means of retarding the degenerative process of old age—preventing it if possible.

BW: What has been discovered so far in relation to the aging process? Do we know anything now that wasn't known, say, 15 or 20 years ago?

DUTCHESS: Well, of course, some of the biggest things that have been discovered are the very effective therapeutic agents unavailable at that time. For example, no one ever heard of penicillin 20 years ago. So lobar pneumonia was a disease that caused high mortality, particularly in the aged. Now lobar pneumonia isn't too important because penicillin usually cures it promptly.

Other things that have been discovered are the nature of the process that causes degeneration of the blood vessels. That, I would say, is the most outstanding development in studying

the aging process in a field where something can be done about it.

BW: Just what is that aging process?

DUTCHESS: That's a hard question. It involves gradual slowing of basal metabolism and changes in endocrine function [action of the glands that secrete hormones]. It involves changes in the vascular supply [blood supply to various tissues in the body] to the heart muscle. It includes a reduction in the respiratory capacity, so that elderly people can't absorb the same amount of oxygen in the same length of time. There is a gradual reduction in athletic capacity. Then in most people it involves vascular degenerative changes that may take place in the heart, or the brain, kidneys—any part of the body.

BW: What medical progress has been made in offsetting these processes, aside from the development of antibiotics?

DUTCHESS: Well, of course, the knowledge of degenerative processes such as heart disease and diseases of blood vessels is much greater than it was even 10 years ago. Internists and cardiologists can now make more accurate diagnoses of the conditions involved. And by prescribing a proper regimen of diet, exercise, sleep, living, examinations, and so on, they can frequently prevent the recurrence of any serious heart or blood-vessel disease—or the recurrence of some condition caused by those changes that you might not easily recognize as being heart disease or vascular disease.

BW: Have any specific medical treatments been developed yet for heart and blood-vessel diseases?

DUTCHESS: For infectious processes, yes; for degenerative processes, no. But other treatments can be effective. Take the commonest form of heart disease, coronary heart disease. A regimen of proper living, regulated living, will help to prevent the recurrence of such attacks.

BW: Could you explain just what physical changes occur that bring on heart disease?

DUTCHESS: The commonest cause of heart disease developing in middle life is vascular degeneration—a change in the vessel wall, called atherosclerosis. It occurs when deposits of cholesterol esters or other lipoid materials—these are fatlike materials—build up in the lining of the vessel, thus causing a roughening of the vessel wall. This may cause a blood clot to form at that point and thereby stop up the vessel. This condition may also produce weakness in the vessel wall and thereby cause that vessel to rupture under normal or increased activity.

BW: What would you liken that action to—what analogy would you use?

DUTCHESS: I should say it could

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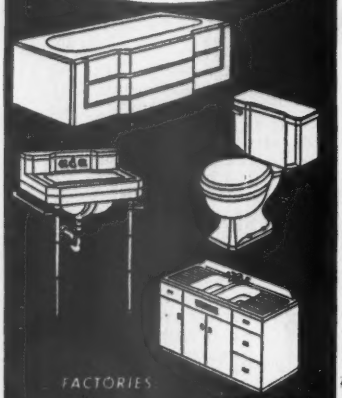
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be compared to the accumulation of rust or sediment in the cooling system of your automobile, or the roughening of the inside of an old garden hose that causes it to clog up.

BW: In other words, you just don't get as much blood—and therefore as much nourishment—through your system as you would ordinarily?

DUTCHESS: Right.

BW: Are businessmen more susceptible to this degeneration than, say, a farmer?

DUTCHESS: I think in general they are, because their physical inactivity is a destructive influence. The man who is working physically is less likely to have a coronary attack.

BW: Do you mean that the businessman can do nothing to prevent such an attack?

DUTCHESS: Not at all. But he should start in at a comparatively early age—for example, at the age of 40. And any man or woman who starts at the age of 40 to prevent or at least retard the degenerative changes of later life has a very good chance of doing so. Whereas the man who never thinks much about it until he has had his first coronary attack, or his apoplexy, or cerebral thrombosis when he is 60 has probably lost his chance of avoiding serious trouble. I don't mean to say that a man who has had a coronary attack presents a hopeless condition by any means. But I am stressing the fact that a man who is 40 or 45 shouldn't wait until he is in middle-age trouble to do something about it.

One important point in connection with this: Various pharmaceutical companies have now developed remedies containing special nutritional factors—vitamin B fractions and amino acids—which apparently have decided protective values in patients who may develop vascular degeneration. I think the routine use of such products beginning at the age of 40 will become common practice and will not only prolong thousands of lives, but will prolong the health and productivity of thousands of men and women far beyond what it would be without them.

BW: Aside from using these products, what sort of program should this 40-year-old follow as a preventive?

DUTCHESS: The first thing he should do is to establish the habit of keeping in touch with his doctor for regular physical examinations—at least once a year—and for advice concerning all the problems he may have. One of the most important things a man over 40 should do is to learn to eat sensibly. He must not gorge himself, and he must not eat even a little more every day than he should, because if he does he will continue to put on weight. And life insurance statistics have long-since shown that people who are over-



"If people are capable of some productive activity, they would be wise to continue it as long as they live."

weight live much less than the average life span, whereas those who are average or underweight stand a very good chance of going beyond the life expectancy.

He will learn not to smoke excessively; he will learn not to drink excessively; he will learn not to load his system up with successive days of terribly hard work, long hours, loss of sleep, and successive nights of dissipation. The business executive will learn that the most priceless asset any businessman can ever have is his healthy body and his healthy mind, and by learning to take proper care of that, just as one would of a fine machine, he will not merely prolong his life, but he will prolong his health and vigor.

BW: Are there any figures to show that people are living longer than they were, say, at the beginning of this century?

DUTCHESS: The over-all life expectancy is 68 years for the person born in the U.S. today, as against an expectancy of about 49 years in 1900. Also, in 1900, only 18% of our population was 45 or over. Now it's up to 29%, and in the year 2000 it will probably be over 40%. By then, 85 will be a very common age.

BW: Translated into practical terms, does all this mean that the average worker today is more capable, more vigorous at the age of 60 than he would have been in 1900?

DUTCHESS: Oh, yes—undoubtedly. The 60-year-old man today has had the advantage of a much better standard of living—he has had the advantage of prevention against infectious diseases. He has had the advantage of better nutrition and better dentistry. Any number of things might be mentioned



"If you force everybody to retire at age 65, you are going to create added medical problems."

that have contributed to conserving his strength and health, and therefore prolonging his productivity.

BW: Now in view of this fact, would you say that the common retirement age of 65 is getting to be an age that is too low, perhaps?

DUTCHESS: Yes. It is not too low, of course, for some people. But to apply the rule of compulsory retirement at a specified age—to apply such a rule, without intelligent consideration of individual cases—is not only unfair to the person concerned, unfair to his family, but it deprives business organizations of the continued productiveness of that worker. Now it is just possible that he is still at his peak at the age of 65. If he is, it would be unfortunate not to go ahead and get another five or 10 years of productive effort from him.

You understand that I am talking from a medical viewpoint. Compulsory retirement at a certain age may be a necessary evil from an administrative standpoint, since otherwise management would be given the burden of telling lifelong associates that they are not so good as they were while others of similar age are.

BW: Did World War II show anything of interest about the relative efficiency of older and younger workers?

DUTCHESS: Yes. It was learned in World War II—and at other times, too—that the older worker has certain advantages. He usually has a lower rate of absenteeism. He is less likely to come in with a hangover. He is less likely to be unhappy in doing his routine day's work.

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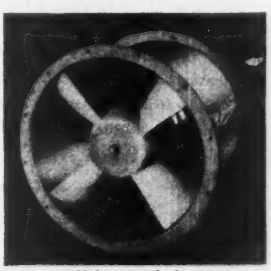
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pacity; he is doing things that don't require any unusual physical stamina—they merely require, as I said, good health and an alert mentality.

BW: Do you think that management is as aware as it should be that these things are true and that it can get more than it thinks it can from elderly workers?

DUTCHESS: No, I don't think management is sufficiently aware of it. Frequently there is the feeling that by the time a man is 65, even though he is doing a good job, he should have to retire. But if the man is doing a good job, it is too bad to be deprived of his services. A company should keep its high-grade people on as long as they are productive. When the time comes that they can no longer produce efficiently, that would seem to be the time to retire them.

BW: Would you say that this improvement in the ability of the elderly worker now is limited to routine sort of work, or is it evident in—well, at executive levels, say?

DUTCHESS: I think it is evident at executive levels, too. I think you will find many men 65 or 70, for example, who have just as keen an interest in the business and in new developments as the younger executives have.

BW: But is he as reliable from the point of view of health?

DUTCHESS: Yes, he is. Let's go back to what I said about an older man having a lower rate of absenteeism than the younger. I think that the employer will frequently find that the person who is older may perform on a more even keel, physically, than a younger one. For example, I have noticed that many young men have colds and other indispositions very frequently.



"Life expectancy is 68 years . . . today. In the year 2,000 . . . 85 will be a very common age."



"I can't run races, I can't win any weight-lifting contests, but . . . my work is not demanding in a physical sense."

And if I can take myself as an example, I am 55 and in the past five years I have stayed home with a cold once or twice, and with that exception I have never had a day off for disability.

BW: How strenuously can you work every day?

DUTCHESS: Well, as an example, the day before yesterday I was in the office from 8:30 until I took the train to Philadelphia at 3 o'clock. We had a conference at the University Hospital and had dinner with that group. My associate and I came back on the train together and discussed business for 1½ hours on the way. I came home and read an article in Fortune and was in bed at 11:30.

Yesterday morning I was in the office at 8:20 or thereabouts. I was called up to the Sherry-Netherland for a conference at 12 o'clock. Then I found out I had to go to Washington. I got the 4 o'clock plane, had a conference with a government official at the Pentagon. I got home and to bed at 11:30, and I was in the office this morning at 8:15. Tonight I am going to Columbus—tomorrow night I'll come back on the train.

BW: You sound like a man blessed with extraordinary vigor. I assume you don't think it's extraordinary.

DUTCHESS: No, because my work is not demanding in a physical sense. I can't run races, I can't win any weight-lifting contests, but my job doesn't require that.

BW: Would you say that the loss of useful activities of this kind shortens the life span?

DUTCHESS: Yes, I think it does. Everyone requires a certain amount of activity—a certain amount of physical exercise. But one also requires a steady, continuing interest. For the average person, men particularly, nothing provides that like a business or a job.

BW: In other words, you don't think it wise for men to retire and start "enjoying life"?

DUTCHESS: No, I think that if people are capable of some productive activity, they would be wise to continue it as long as they live—perhaps take more frequent vacations, longer vacations—but always have some continuing activity, continuing interests.

BW: Since many pension plans nowadays require people to retire at the age of 65, is this cutting-off of activity likely to present a serious medical problem to doctors? Or will people simply drop dead after they retire?

DUTCHESS: Well, the pension, of course, would never make them drop dead, because life insurance statistics show that people who have an adequate income live longer than those who don't. But I agree with you, that if you force everybody to retire at age 65, you are going to create added medical problems.

BW: Well, if all these older people keep working, won't that upset our economy? How will younger men get good jobs?

DUTCHESS: I think the answer is an expanded economy. The younger worker, feeling that the older man should be retired so that he can have his job, should realize that as the number of older men increases, we can't retire all of them unless the younger men are willing to do the work and pay the taxes to support the old men in idleness, and I don't think anybody wants to do that. The thing that makes for prosperity is maximum productivity and maximum production.

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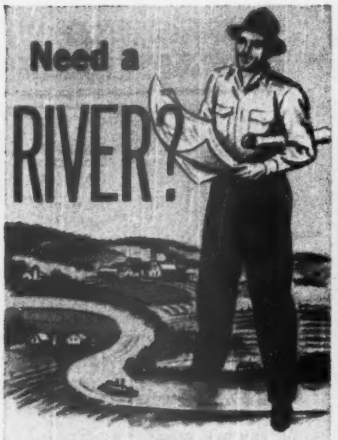
★ STRATEGIC LOCATION—which easily offsets the single disadvantage of distance from coastal cities.

No matter on what scale you measure the factors, the balance shows heavily in favor of Nebraska. For detailed information write direct to this department of State Government. Your inquiry will receive prompt and confidential action.

DEPT. BW-22

NEBRASKA RESOURCES DIVISION

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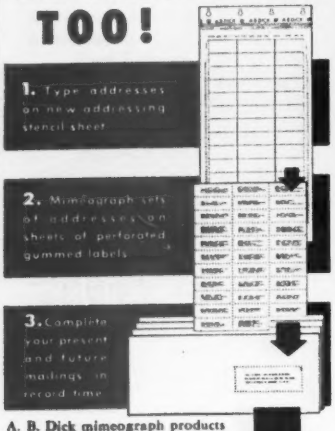


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Send me illustrated information about addressing with a mimeograph.
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City _____ Zone _____ State _____

COMMUNICATIONS



1 Someone wants a doctor; he's not at home. So the summons goes to Mechanicall. Here operator picks audio slide that will put the doctor's code on the air.



3 The receiver fits handily into a pocket. Carrying it, the doctor can go where he likes, knowing that distress calls will follow him via the gadget.

Radio Brings the Doctor

You call your doctor; nobody knows where he is. That used to be the end of the line. But not now, not if the doctor uses the new mechanical service operated by Telanserphone, Inc.

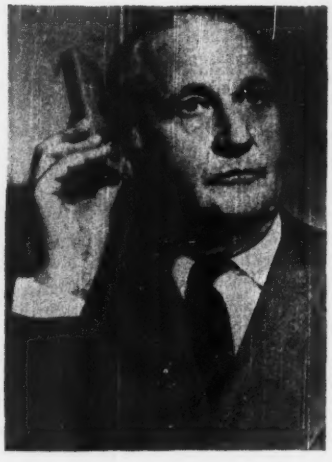
Telanserphone has been taking calls for a few thousand New York customers for 28 years. All it could do, though, was take a message. Now, with Mechanicall, it can summon the wanted person.

Telanserphone has a radio frequency assigned by the Federal Communications Commission. When it gets a call for a customer it slips an audio slide into its machine. The code number of the customer flashes across the airwaves, once a minute till an acknowledgement is received.

The customer has a pocket-sized receiver. When he tunes it in, he hears his number. So he phones Telanser-



2 Call goes out once a minute as the slide is fitted into machine.



4 The doctor can tune in at any time, to see if his signal is on.

phone, gets his message, hustles to hospital or bedside.

The machine can handle 60 audio slides at a time. At present, about 200 doctors use the service, at a $10-a-month charge. Telanserphone sees other rich fields to pick up customers—photographers, detectives, radio men, truckers. But the doctors will probably have priority if the FCC decides to set up a rationing system to be used in case of emergency. For there is still just room for 60 calls a minute on the machine.

Creative Package Engineering



this corrugated "shock-proof" shipping box

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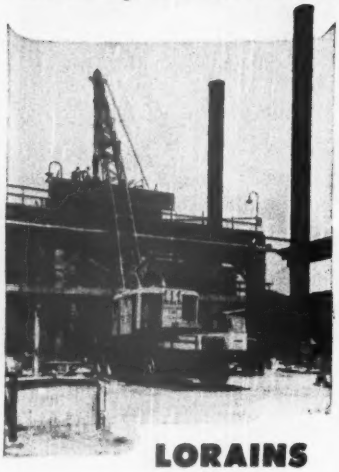
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Lifts Up to 45 Tons



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serve all phases of industrial material handling . . .

• You'll seldom see giant rubber-tire cranes like this one around a factory. But the National Tube Co. at Lorain, Ohio, needed a "giant" to dismantle and erect overhead crane girders weighing up to 41 tons. Eichleay Corp. of Pittsburgh, Pa., rolled on the job with their big 45-ton Lorain MC-824 . . . and saved time and money because of rubber-tire mobility.

You *will* see hundreds of similar, smaller Lorain rubber-tire cranes in plants like yours across the nation—because Lorain builds such material handling cranes from 10-ton capacity up to the "world's largest."

You'll see them lifting, loading, unloading, storing, stockpiling every size, shape and type of material . . . you'll see them saving manpower, time and money on every lift . . . on every fast shift around the yard.

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DEFENSE BUSINESS

NPA Backs Down on Building

Construction men protest policy statement on halting nonessential building after it is started. NPA revised the ruling. Now builders press for more controls relief.

National Production Authority has lost face in its brief and inglorious row with the construction industry. It remains to be seen if the agency also has lost its nerve.

• **Policy**—The scrap involved a policy statement which NPA inserted in its order banning new starts on recreational and amusement construction (BW—Nov.4'50,p40). NPA warned that other construction might be curtailed later and reserved the right to halt work after it already had been started.

• **Protest**—Construction men, spearheaded by the politically potent Associated General Contractors, immediately protested. They said that NPA policy hung like a sword of Damocles over the head of any contractor who started a job. NPA's administrator W. H. Harrison replied firmly: It was not the government's intent to stop

Few Shortages, So DO-Numbers Are Few

The DO rating system for materials priorities, launched last month by the National Production Authority, hasn't gone into high gear yet. That became apparent this week when NPA produced a glossary of the DO-numbers activated by the only two agencies authorized to use them, the Defense Dept. and the Atomic Energy Commission.

• **Sorting System**—The DO-numbers provide the mechanics for sorting out priorities. Each kind of product has its own DO-number. This will speed up the identification and classification of various orders as they filter through industry.

The new NPA glossary showed that the military were using only 15 of the 39 numbers assigned to them. AEC had classified the uses of only five. The reason: Few of the contracts issued by either has to run into general materials shortages of the size expected when defense production gets into full swing.

• **Catch-all**—That's why the Defense Dept. was maintaining DO-21 as a sort of catch-all classification for whatever production programs happened to hit snags. The now-critical items were covered by a dozen rated programs, from aircraft through subsistence.

Eventually, of course, Defense's presently unclassified ratings would be assigned to materials-handling equipment, medical supplies, and the like. But the squeeze still isn't tight enough in these areas.

DO-99 can be assigned by either the Defense Dept. or the AEC. It covers the so-called basket orders—rated orders for shelf items and others required in amounts smaller than recognized deliverable commercial quantities. Here are the classifications:

Defense Dept.:

01 Aircraft
02 Guided missiles
03 Ships
04 Tank-automotive
05 Weapons
06 Ammunition
07 Electronics & communications
08 Fuel & lubricants
09 Clothing & equipage
10 Transportation equip.
11 Building supplies for overseas
12 Subsistence items
21 Miscellaneous
22 Contract construction
23-39 Unassigned
98 Production equip.
99 Basket designation

Atomic Energy Commission:

40 Operations
41 Construction, except construction equip.
42 Construction equip.*
43 Privately owned AEC facilities*
44 Additions to privately owned AEC facilities*

* *Must be approved by AEC each time used.*

construction under way, but it might be necessary.

• **About Face**—A couple of days later, Harrison did a complete about-face. The construction policy was revised. The revision meekly indicated that NPA might "further limit the commencement" of unessential construction, said nothing about stopping work in progress. It was a clear victory for the contractors.

They promptly pressed for more controls relief. Now they are demanding that NPA authorize the Defense Dept. to issue DO orders for essential industrial construction by private companies. They also want priorities for private construction of rental housing at military establishments—privately owned quarters to be rented to military and civilian personnel. No one would bet that these requests will be rejected.

NPA's defeat in its first attempt to write a really tough order makes industry men wonder just how much backbone it will show in other areas. There was much talk of hard-boiled cutbacks in metals use this week, but after the construction fiasco no one knew whether to take it seriously.

• **DO Dole**—Meanwhile, NPA and other agencies are gradually getting the new control system worked out.

NPA has authorized the Defense Dept. to pass on its DO ratings to other federal agencies. This would permit the Army, for example, to lend its priorities to the Bureau of Standards for tests of armor plate.

• **Steel for Warehousers**—NPA also assured independent warehousers that they would get a cut of the available steel supply left over after priority projects have taken their bite. It directed suppliers to subtract the total demand of their rated (DO) and certified (essential nonmilitary) orders from total production, then supply warehousers from the remainder in proportion to the steel sent to warehouses in the first eight months of this year.

Expansion Loans

The National Security Resources Board finally has worked out the ground rules for direct government loans to finance expansion of production under the Defense Production Act. The act provided $600-million for such loans before next July 1, another $1.4-billion thereafter.

Applications for loans will be handled in much the same way as those for accelerated amortization of expenditures for expansion. You can get blanks either directly from NSRB or from field offices of the Commerce Dept. When you fill out the forms, mail them directly to NSRB, which then will send them to other agencies for screening. NSRB has the final word, however.

(*Advertisement*)

Pallet Conveyor Speeds Production

Unique pallet flow system speeds processing, assembly, finishing . . . provides quality control

A radically different approach to production line problems—the Guided Pallet Conveyor* permits finer workmanship at greater speed and at lower cost than ever before. Well within the budget of any plant, it reduces inventory of work-in-process and process time up to 50%.

• **Quality Control**—At desired points on the line, air-lift work stations (see illustration) allow pallets to be rotated for convenient work positioning. Operating time may be varied as more difficult work comes to the station without slowing production pace.

• **Installation**—With the Guided Pallet Conveyor, the *line* can be fitted to the *problem*. New layouts can be made easily without expensive shutdowns—re-routing is as simple as rearranging a toy train track.



• **Further Information**—Guided Pallet Data sheets, giving technical information, and typical application photographs may be obtained by writing to The Rapids-Standard Company, Inc., 346 Rapistan Bldg., Grand Rapids, Mich.

* Pat. Pend.

To determine Guided Pallet application in your plant, consult your Rapids-Standard representative.

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The case of the *outgoing* income

(Based on Hartford Claim #40B80516)

We are in the wholesale grocery business. To enable our retailer customers to restock their shelves for each day's trade we make regular night deliveries. Collections brought in by our drivers after office hours are slipped through a wall slot into our night depository — a steel box that is kept in a locked room.

One night someone broke into this room, forced open the box and stole over $4800 from it. Whether this was an "inside job" or the work of an intruder could not be determined. Under old style insurance policies that circumstance might have caused us considerable trouble and delay in collecting our loss. Fortunately we carry modern comprehensive Hartford protection and the Hartford promptly paid us in full.

• • •

Here is an excellent example of the advantage in having the modern, broad Hartford "3D Policy." In a single contract, free from technicalities, this insurance covers businessmen against losses of money and securities by dishonesty, disappearance or destruction, and loss of other property by burglary, robbery or dishonesty. Without costing more it eliminates loopholes that can exist in less comprehensive combinations of protection.

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Civil Air O.K.'d

Commercial production of transport planes and parts gets all-clear from military. Shortage is acute.

Top military officials have flashed a green light to one branch of civilian transport. Production of commercial transport airplanes and of spare parts to keep them flying will rate as part of the defense program.

Airlines and plane manufacturers had laid it on the line to the U. S. Air Coordinating Committee, made up of top federal administrators of civil and military aviation: Either the acute shortage of transport planes and replacement parts must be relieved or transports on U. S. and foreign airlines would have to be grounded.

• **Procedure**—Details of the new procedure are still to be worked out. The committee asked the Civil Aeronautics Board and the Civic Aeronautics Administration to confer with airlines and manufacturers, report back the amounts and types of shortages. Then ACC will make recommendations to the National Production Authority for necessary action to relieve the shortages.

NPA says it won't issue DOs (defense orders) for the civilian items—though the military have agreed that they should be on an equal priority footing with similar military equipment. ACC says that NPA has promised to cooperate and that the way will be cleared to build what's needed.

• **Reasons**—Three factors led to ACC's decision:

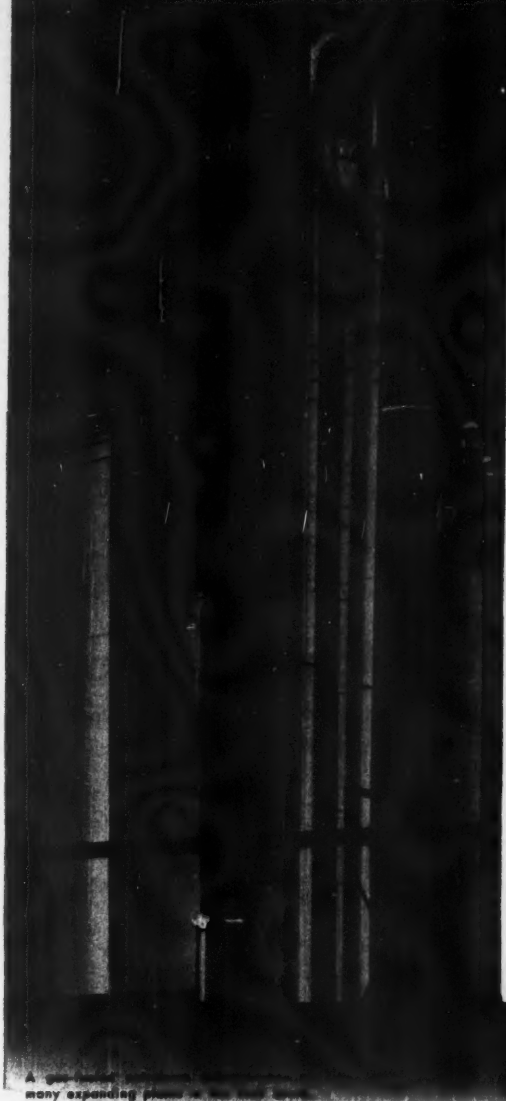
(1) Military air transport service leans heavily on the commercial airlines as a military reserve for any emergency, full-scale airlift. This was demonstrated in the Korean airlift, as well as in the earlier Berlin airlift. Plans are to take over all four-engine commercial transports for military use, if necessary.

(2) The airlines now have on order 163 new cargo and passenger transports. On top of these, the military has placed orders for 50 planes of commercial type; these are virtually interchangeable with the planes ordered by the airlines. If plane builders can get materials for all at once, both military and civil buyers will benefit in lower costs. But if civilian production is cut off, schedules will be out of kilter.

(3) Commercial air transport lines are recognized as a vital communications link domestically and internationally, in war and peace. It would be poor wartime economy to let airline planes be grounded for want of spare-parts priorities.

20% OF ALL PROPOSED PRIVATE CONSTRUCTION IN THE U. S.

is planned for the



One-fifth of all proposed spending of private money for construction *in the entire United States* will go to the Gulf South ... more than *three billions of dollars* of private money to be invested in new industrial, commercial and other building. That means more jobs, more spending money, greater prosperity for all.

Private capital has confidence in the Gulf South—and there are good reasons for that confidence.

The Gulf South is truly America's new industrial frontier. A year-round working climate ... abundant skilled and semi-skilled labor—tremendous supplies of diversified raw materials ... rich mineral deposits. Miles of modern highways ... an extensive network of railroads, supplemented by inland waterways—and here in the Gulf South, the growth of markets is keeping pace with the expansion of industry.

Locate your new plant in the friendly, cooperative and progressive communities of the Gulf South where United Gas is meeting the fuel requirements of many growing industries. Our Industrial Development Department will furnish information to aid you in deciding on a suitable location.

* *Proposed privately financed construction as reported at the end of 1949 by ENGINEERING NEWS-RECORD, a McGraw-Hill publication, for Texas, Louisiana and Mississippi.*

A gas [illegible] many expanding [illegible]



UNITED GAS SERVING THE *Gulf South*

WRITE INDUSTRIAL DEVELOPMENT DIRECTOR, P. O. BOX 1407, SHREVEPORT, LA.



It costs a lot of money to replace underground pipe. When you dig it up, it means digging down into your pocket . . . something every business man wants to avoid in these days of aviating costs. To combat the many corrosion hazards lurking beneath the ground—to eliminate excessive failures particularly in "Hot Spot" locations—use a pipe material that will live to tell the story: Byers Wrought Iron. In one typical case the pipe served 30 years in one location, was reinstalled and used 20 years in another, and finally was reclaimed and sold for still another application. Translate this service into dollar savings and you'll understand why so many underground lines are wrought iron.

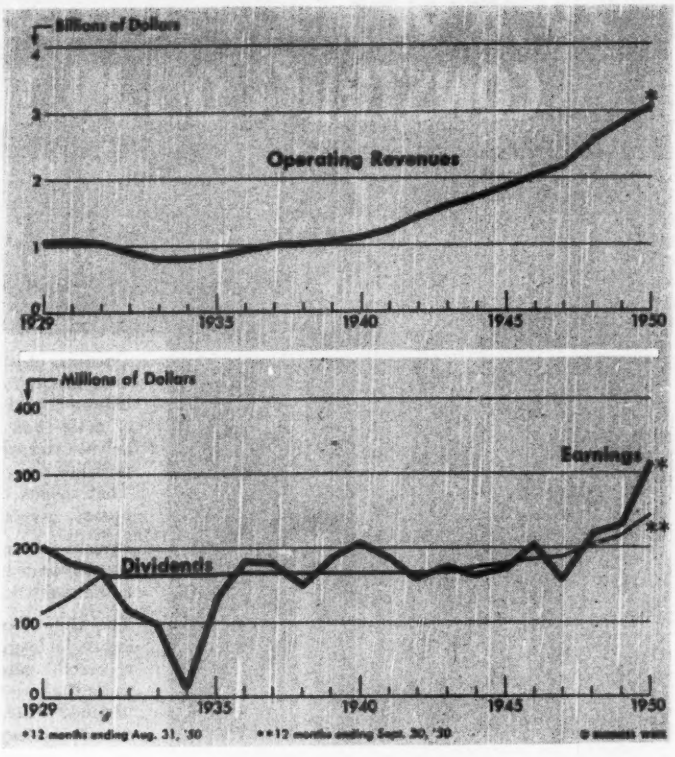
Corrosion costs you more than wrought iron

Underground pipe lines are only one of the many applications where corrosion costs you more than wrought iron. For a brief "how-where-why" story, ask for the ABC's of Wrought Iron. Write A. M. Byers Company, Clark Building, Pittsburgh, Pa.



BYERS
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FINANCE



Mother Bell Biggest Spender

With $5-billion already laid out for expansion since 1945, AT&T asks stockholders to approve two more huge issues. New-plant program continues at $1-billion-a-year rate.

The Bell Telephone System has been the biggest spender of all in the post-war capital expansion boom. And it's going to continue that way. Bell, which has already rung up the greatest new-plant spending in corporate history, still has a long way to go in its expansion plans.

Mother Bell has laid out something like $5-billion on increasing facilities since 1945. And the bills continue to run at about $1-billion a year. What's more, it's hard to predict when the group headed by American Telephone & Telegraph Co. will taper off on its spending.

• **Summons**—All this is nothing new to AT&T's more than 950,000 stockholders. Some weeks ago, they were summoned to meet next Wednesday to perform what is becoming a routine task for them: vote approval of selling another gigantic block of securities to finance expansion.

This time they will be asked to O.K. three things:

• The sale of approximately $435-million in new convertible debentures—the largest such issue ever in Bell history.

• An increase in AT&T's authorized capital stock from 35-million shares to 45-million.

• The sale of 3-million of the new shares to employees.

Approval of two-thirds of outstanding shares will make this program legal; and there is expected to be no trouble in securing it.

That doesn't mean that all stockholders are happy to hear that new money is needed. Far from it, judging

by the stock market's reaction to the first announcement.

• **Shares Dropped**—The price of AT&T shares fell off several points when the news broke. Some holders evidently felt that issuing a huge block of new securities was bound to have an unfavorable effect on Mother Bell's per-share earnings.

This state of mind seems to persist; there has been no sharp recovery in the price of the stock. Lately, it has been selling at around $150 a share, $2 off the pre-announcement price. And the figure is much closer to the $146.25 low for the year than it is to the $161.75 high.

Wall Street, however, doesn't agree wholeheartedly with this dim view. It remembers that AT&T's management has always proved itself smart enough to operate new facilities so as to cover their own cost.

• **Public Utility**—It's not surprising that AT&T should have to seek so much capital to finance its vast growth. Bell System companies have never been able to build up nest eggs adequate for expansion. That's because they're public service organizations. Like all public utilities, they're forbidden by law to earn more than a "fair return" on their investment (BW—Nov.4'50,p108). So expansion has to be paid for by depreciation reserves and new securities.

There's plenty of evidence that the government officials with power to regulate AT&T's far-flung empire recognize that factor. State authorities have different interpretations of "fair return," but on the average they haven't treated Mother Bell's chicks badly. Since 1946, rate increases that come to around $405 million a year have been granted to help the companies cope with rising costs.

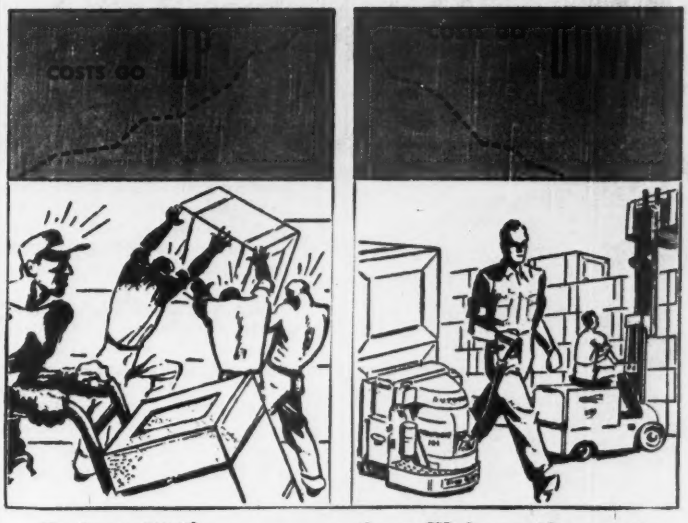
• **Increased Net**—These rate hikes have done more than stimulate gross revenues; net income has also shown a steep rise lately (chart, page 110). AT&T's earnings have been covering its sacrosanct $9 dividend by an increasing margin in the last couple of years, despite the higher interest and dividend payments caused by expansion. Many Wall Streeters think that 1950 earnings will run above $12 a share, compared with $9.22 in 1949. If they're right, it will be AT&T's highest earnings rate in many years.

• **Cost Control**—Management has contributed mightily to this favorable trend. Things would be a lot different if Mother Bell's staff hadn't done such a job in holding down operating costs.

Costs have been the biggest postwar problem for the system, with a rocketing wage bill the chief factor. Payrolls now absorb about half of all receipts; in 1939, they took only 37%. In part, that's due to unionization.

The cost of materials has been another headache. Even some time back,

What is the cost of handling your material *MANUALLY?*



Deduct 50% or more and you'll have the cost of handling with AUTOMATIC Electric TRUCKS!

Worth consideration, isn't it? Imagine what a saving like that could do to make your profit figure look better, your cost structure more in line with what it should be!

These amazing electric trucks lift, move and stack your material ceiling-high with easy, finger-tip control . . . hundreds of pounds, or tons and tons. One operator handles more material than any three workers could by antiquated manual handling methods, releasing two men for more productive, profitable work.

Investigate the Automatic Electric Truck Way to cut handling costs, and you'll find they are *not* a capital expenditure, but a money-saving, cost-cutting bonus every time you handle material. Mail coupon for the money-saving facts.

FREE—Material Handling Check Chart and Catalog



Let us send you this money-saver Check Chart of 8 important questions you should ask yourself about your company's material handling. If you answer "NO" to more than 4 of them, you should investigate how Automatic Electric Trucks can cut your handling costs 50% to 75%. With it, you get a free Booklet-Catalog: "How to Make Your Material Handling Pay Dividends!" Mail coupon!



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Please send me complete facts on money-saving Automatic Electric Trucks without obligation, and FREE CHECK CHART with Catalog.

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City.....*Zone*.....*State*.....

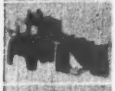
Addressing Machine Users of Distinction are switching to ELLIOTT ADDRESSING MACHINES because:



This tray loaded—$45.— Elliott Addressette prints 20 different addresses per minute.



This Elliott Model 800 automatically ejects addressed forms at a speed of 60 different addresses per minute.



This Elliott Model 1250 automatically feeds forms and ejects them at a speed of 125 different addresses per minute.



This Elliott Model 1500 will print and address post cards and automatically feed envelopes, and any form can be hand fed to it.



This Elliott Model 2000 will automatically list names on pay roll sheets and address all other pay forms and office forms.



This Elliott Model 3000 can be equipped with an attachment to print or skip addresses automatically and 39 other attachments to perform any addressing task.



This Elliott Model 5500 has an electric drive and automatic form feed but no automatic address selector attachment.



This Elliott Model G-EW has an electric drive and automatic form feed and automatically skips unwanted addresses.



This Elliott addressing machine automatically addresses and prints and chops off wrappers from a roll of blank paper.



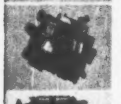
This machine automatically prints, addresses, dates, scores and chops off Telephone, Electric, Gas or Water bills from an endless roll.



This machine automatically addresses and prints Mail Order Catalog labels and automatically sorts the labels in different pockets according to the volume of business from each customer.



After IBM or Remington Rand equipment prepares dividend cheques, insurance premium notices, etc., this machine addresses the punched card forms with unerring accuracy.



From a big roll of blank paper this machine addresses and prints and dates and scores statements for cycle billing and eliminates the cost of printing.



This machine simultaneously lists two or more columns side by side on tax rolls or pay sheets, twice as fast as old fashioned zig-zag addressing machines.



This electric Keyboard Punching Machine accurately punches holes in the frames of Elliott address cards to show publication subscription expiration dates and all other data regarding the addressee.

Elliott ADDRESSING MACHINE CO.

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it was estimated that there was a 170% rise since 1939 in the average price of six items that the system uses in great quantity.

Recently, AT&T managers have been getting a firmer control over costs. Plant expansion has enabled them to install many new phones, to upgrade service, and to get in on the TV boom via radio beam and coaxial cable installations. Most important of all, it's been possible to extend the use of the wage-saving dial systems. More than 74% of all Bell phones are now dial-operated.

• **Operating Ratio**—These factors have all contributed to lower costs. The operating ratio (excluding taxes) has been moving steadily down from the alarming levels it hit in the early postwar years.

This trend, of course, has a tremendous effect on net earnings in a time like this when gross is rising rapidly. In the June-through-August period there was a 14% rise in gross receipts. And the operating ratio, on a yearly basis, had dropped from around 78% to roughly 71%. As a result, Bell earnings jumped about 32%, from $2.41 a share to $3.19.

• **Bond Issues**—The market for new equity issues has been generally poor since the war, so most of Bell's new money needs have been filled by debt issues. This has brought the system's capitalization to roughly 50% stock and 50% bonds. This irks AT&T officials, who prefer a bond ratio of not over 40%.

However, Mother Bell has been smart. About $1.1-billion of the $2.3-billion new bonds sold since 1945 have been convertible into stock at an attractive price. Such conversions have been heavy, about 55% up to quite recently. This has had a double effect.

• It has held down the proportion of bonds in the over-all capitalization.

• It has brought in much new capital, since bondholders have to pony up sizable extra cash to convert their bonds to stock.

The general outlook for Mother Bell is encouraging enough. Most Wall Streeters expect gross revenues to keep on climbing for some time. And they think earnings will continue to more than cover fixed charges, plus the long-maintained $9 dividend.

• **Rising Taxes**—There's one fly in the ointment: uncertainty over the effects of the generally expected increase in the federal tax load on business. AT&T was hard hit by the World War II excess-profits tax, which took 11% of gross in 1945.

Two factors serve to temper these tax fears. The company has a better cushion of earnings than it did 10 years ago. And the utility industry is trying to arrange special treatment under any new EPT.

FINANCE BRIEFS

More stocks were traded on the New York Stock Exchange in October than in any month since January, 1946. Volume for the first 10 months was 422-million shares, biggest total for that period since 1933.

•

Mutual Savings deposits rose $29-million during September, compared with a loss of $39-million in August, says the National Assn. of Mutual Savings Banks. Month-end total: about $19.9-billion.

•

A two-for-one split of common shares was proposed by Jones & Laughlin directors. Stockholders will meet soon to vote on the plan.

•

U. S. Trust Co., New York bank, will also increase its shares. A stock dividend will boost the number outstanding from 40,000 to 100,000.

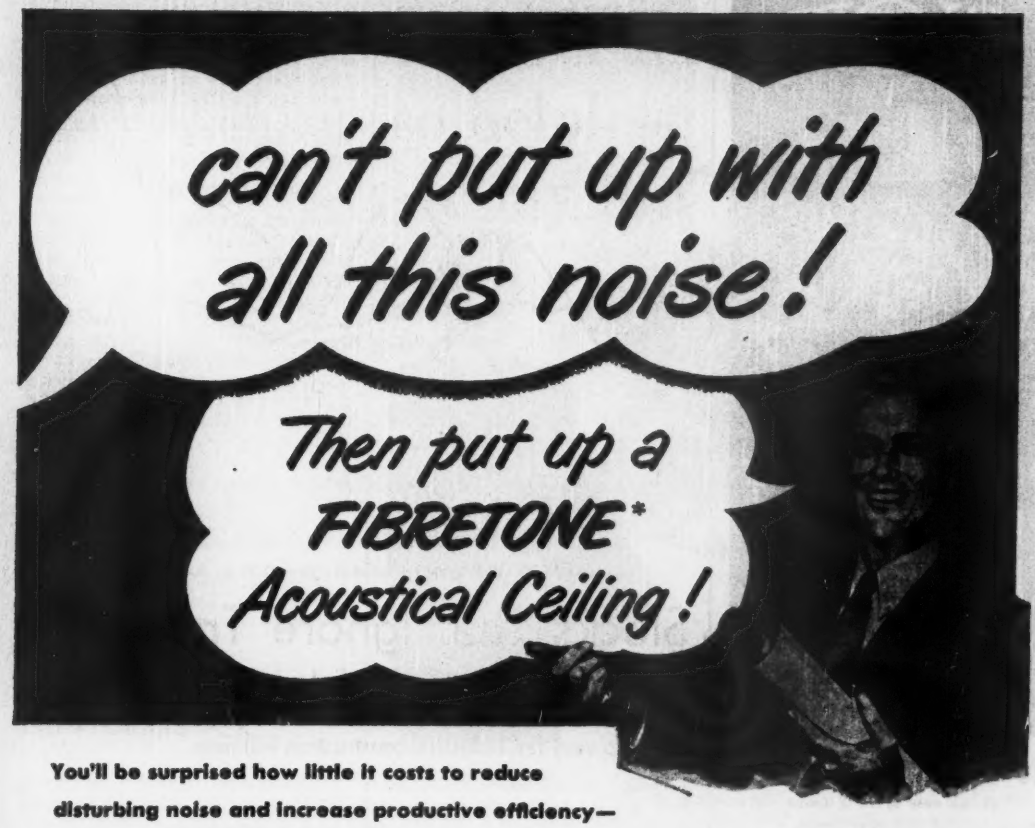
•

Life insurance companies will pay federal income taxes on 6.45% of their investment earnings during 1949, because of the new tax law recently passed by Congress. Cost: about $42-million. Under the previous tax formula (BW—Dec.31'49,p45), the companies had paid no income tax since 1947.



Banker's Private Wire

Walter P. Marshall, president of Western Union Co., touches a button to flash the first message on the "Bank Wire." The wire, largest private switching system Western Union has ever built, now connects 142 banks in 136 cities (BW—Sep.16'50, p106). Next month, 46 more banks will join the system.



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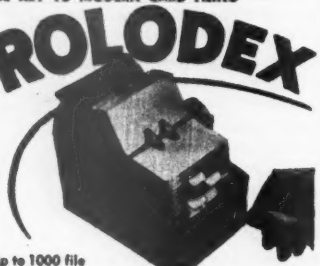
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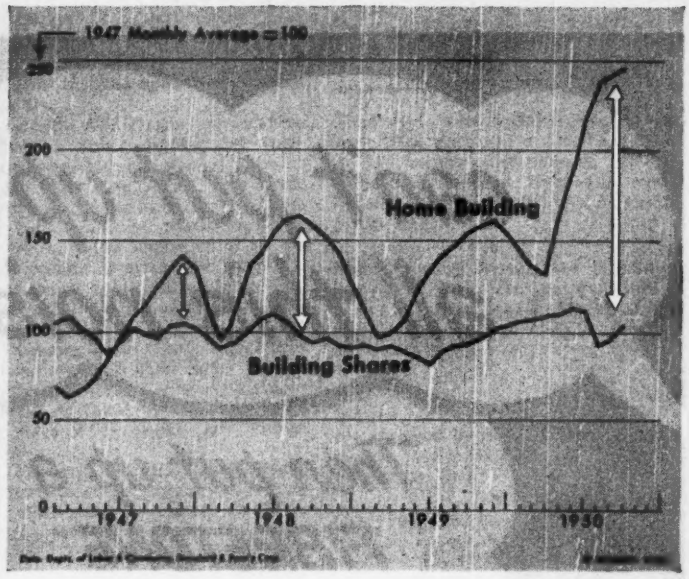
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Stocks That Ignore Trends

When home building zoomed up, building-materials shares were steady. Now, despite credit curbs on housing, these stocks may not drop very far. Industrial construction will help.

Holders of building-materials shares have got the willies. They're anxious to know how credit restrictions on home building are going to affect their holdings.

• **Unexcitable**—Not as much as you'd expect, is the consensus of a lot of Wall Street analysts. They point out that building-materials stocks are relatively unexcitable. While postwar building skyrocketed, Standard & Poor's index of building-materials shares just moseyed along (chart). Since the index didn't go up much when building was booming, these analysts predict that it won't drop far when construction falls off.

Much of the expected decline in 1951 earnings may already be discounted. The building shares took quite a drop with Korea and never have regained all their losses.

• **Slower Starts**—The usual estimate is that credit restrictions will cut home building from an estimated 1.3-million starts in 1950 to around 800,000 in 1951. Furthermore, the Bureau of Labor Statistics reported last week that 37% of all the people who bought new one-family houses in nine metropolitan areas during the second half of 1949 made no down payment at all.

Today, these buyers would have to make down payments of from 10% to 50% of the cost of their homes—5% to 45% for veterans.

• **Earnings Supports**—All this seems to point to lower earnings for the suppliers of building materials: lumber, plywood, asbestos, cement, flat glass, gypsum, paint, plumbing and heating equipment. Yet, maybe the drop in earnings won't be too bad. Here's why:

• The Federal Reserve Board could ease the curbs any time it felt they were getting over-deflationary. FRB seems to be working on the theory that it's better to start tough and then ease off later if you have to.

• Not all building materials go into houses, anyway. It's estimated that, of $25-billion to be spent on new construction this year, only about $10-billion will go into houses. Industrial building will take about $1-billion, commercial construction about $1.2-billion, public utilities $3.2-billion, public works about $7-billion, and farms about $1-billion. Next year, more capital expansion looks like a sure bet (page 19).

• Some building-material companies sell a lot of their products to industries outside the building field. Johns-Manville Co., for example, usually makes about 40% of its sales to other industries. And U. S. Plywood

Corp. sells a good deal of plywood for nonconstruction uses.

• Finally, maintenance demands in 1951 should take about as much building material as in 1950. If new home building is cut back, people will take better care of older houses. Credit terms for home repairs are much easier than for new houses.

• **Recent History**—Take a look at what happened to the building companies in World War II. Except for emergency housing, residential construction stopped. But the net earnings of the companies whose stocks are included in Standard & Poor's index of building shares never fell below the peacetime profits of 1939. Earnings of the building group were below the general industrial average, but not sharply.

• **High Riders**—Cement producers are likely to fare best in a home-building decline. There should be plenty of industrial construction to replace the lost residential contracts (page 56). Some estimates are that 1951 earnings before taxes of this group will be close to 1950 before-tax profits.

A number of companies in the metal home equipment field will probably be able to get some military orders.

Is It Merger or Purchase? Stockholders Ask

Is Baldwin Locomotive Works' proposed acquisition of Lima-Hamilton Corp. (BW—Aug.12'50,p80) a merger or a purchase?

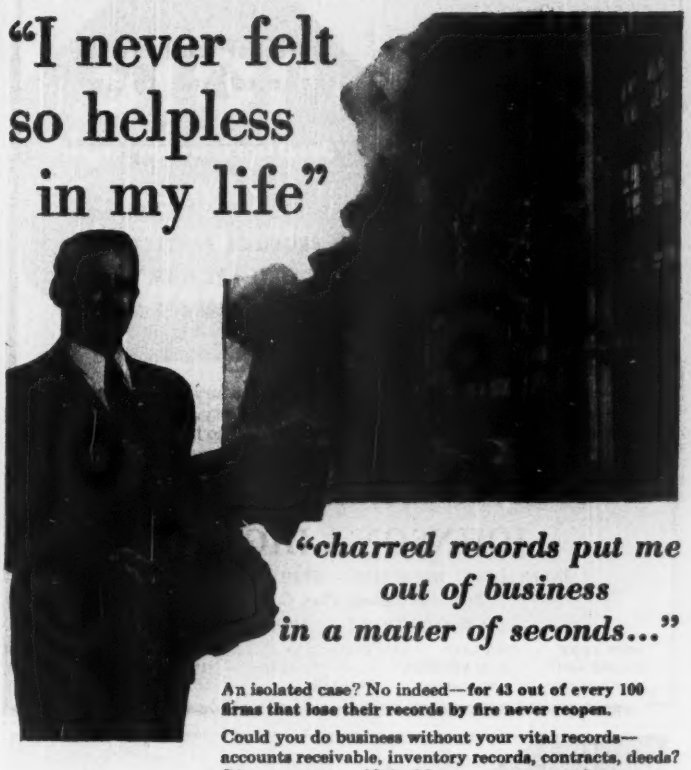
Under Pennsylvania law, stockholders of merging companies are entitled to demand "fair value" of their stock in cash. In the case of Baldwin, this fair value—or liquidation value—is well above the current market value.

• **Higher Value**—Baldwin common now sells for around $13 a share. At the end of last year, Baldwin's book value per share of common was $28.27. The liquidation value may be even more than book value, since Baldwin carries some of its investments on its books at well below their market value.

Dissenting stockholders, who own 6,175 shares of the approximately 2.4-million common shares outstanding, have taken the issue to court.

• **Not Dissolved**—Baldwin's management believes that acquisition of Lima-Hamilton "will not constitute a statutory merger," for Baldwin will not be dissolved as a corporation. It will change its name to Baldwin-Lima-Hamilton Corp., passing out newly issued shares to Lima-Hamilton stockholders on a one-for-one basis. Before it does that, however, it will transfer its major investments, such as its controlling interest in Midvale Co., to a separate company.

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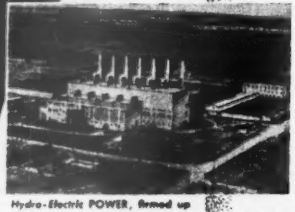
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It won't be an outright surrender; the Treasury is still dragging its heels a little in an effort to slow down the rate rise. But you can be sure that the yield on whatever notes and certificates are offered will be 1¼% or higher.

• **Big Little Step**—That will be a full eighth of a point more than the Treasury offered in its last refinancing. As a result, sooner or later you will have to pay more interest on the money you borrow from your local bank.

The Fed would like an even higher rate. Still, an eighth of a point is a substantial gain—especially considering the strenuous opposition from the Treasury.

• **How High?**—There's more to the bitter feud than a fractional rate change. For one thing: How high should interest rates ever be allowed to go?

The Treasury feels that rates should stay put. It is already paying $5.4-billion a year on the public debt and doesn't want to boost the total. Besides, higher rates on new securities drive down the price of old, make investors shy away.

The Federal Reserve says rates must be raised to cut the credit supply and check inflation (BW—Sep.9'50,p132). Board members think Secretary Snyder's economy is shortsighted; he would hold down the cost of the debt while the cost of planes and tanks skyrocketed.

• **Who's Boss?**—But there's another issue: Who is the Federal's master? The Treasury or the Federal, itself?

Congress set up the reserve system with independent responsibility for control of the money and credit supply; the idea was to ease credit in a downswing, tighten up during inflation.

But the Treasury has paid only lip service to the system's independence. In fact, Snyder and his predecessors for years succeeded in imposing their policies—usually low-interest, easy-money policies—on the Fed. As the fiscal agent of the government, FRB had to help the Treasury raise money.

• **Fancy Work**—In the inflation after the war, the Fed started to balk. But,

by fancy footwork, the Treasury forced FRB to stay in line.

Sometimes when the Treasury had a major financing operation coming up, it would suddenly—and prematurely—announce the terms of the new issues, before the Fed had its say.

FRB would either have to go along or risk letting the operation fail.

Last spring, for instance, the Treasury announced it would refund securities due in June and July with 13-month notes bearing 1¼% interest. Since that was then the going price for 12-month paper, the Treasury was, in effect, shaving the going rate.

• **Open War**—But when the Treasury announced the same terms for its September and October refundings, the Federal flatly refused to go along (BW—Aug.26'50,p25). That's when the fur began to fly.

Round one opened when the Fed began selling governments to yield more than Snyder was offering.

The result: The Treasury's refunding was a success in name only. The Fed had to buy up the Treasury's paper, but the going rate on intermediates is now the 1⅜% the Fed wanted.

The second round has been fought over the terms of the Treasury's refinancing, coming up at the end of the year.

• **No Compromise**—For a time, there were rumors of a compromise. But it seems clear that compromise just isn't in the cards. The one-eighth-point rise FRB has put across isn't enough of an inflation check to let the Fed rest there.

And the Fed's recent actions don't look like compromise. In the prices the reserve system has been paying for three-month bills, yields have been inching up week by week—to 1.311%, to 1.317%, then to 1.324%, and at one time to around 1.330%.

• **Tables Turned**—In recent weeks, the bill rate has dropped a bit—but only because the Fed succeeded in putting up the going rate on notes up to 1.46%. As banks and institutional lenders saw the portfolio value of their intermediates drop, they pulled out of the market. All their cash went into bills. This drove the price up, the yield down. Now Snyder can't ignore the higher note yields in setting the terms of his own offering.

Of course, Tom McCabe, FRB chairman, knows there's a limit to the twist his agency can put on the Treasury's tail. If he overdoes it, Snyder may run to the White House.

But the betting is on McCabe. He knows his way around the White House, too. The clincher: The board is now made up of a lot of tough-minded independents; four members still have more than seven years of their terms to serve.

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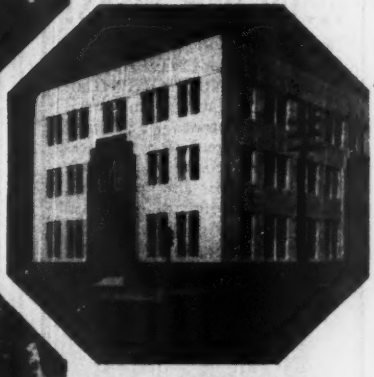




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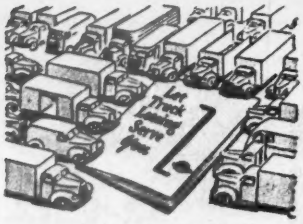


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THE MARKETS

Still More Bear Than Bull

For the short term, that is. Market's response to Korea news and to the elections suggests it will go lower before it responds to long-term upward pressure.

The market took shocks this week—one bullish, one bearish. It showed itself a lot more impressionable on the bearish side. The shocks:

• Bearish—the sudden turn for the worse in the Far East when Chinese troops appeared in North Korea.

• Bullish—the Republican trend unearthed by the off-year elections—for most stock market participants an optimistic sign for the business outlook.

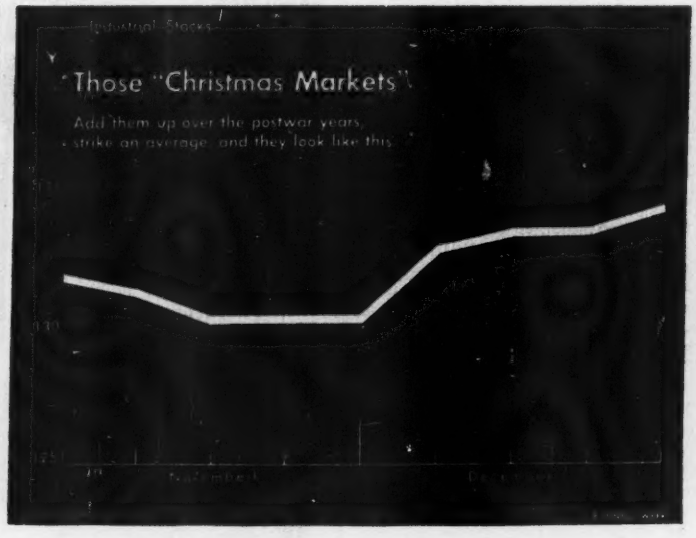
Either one of these alone could be a strong price determinant in the stock market. As far as this week is concerned, each had its edge taken off by the other.

• **Bearish News**—On Monday the new "Korean war" fears scored their licks. Soon after Big Board trading started that day, sell orders had reached such proportions that the stock ticker lagged as much as five minutes behind in reporting floor transactions. What's more, by the time Monday's trading session was over the market had experienced its worst sinking spell since July 12, when the earlier "Korean panic" was holding sway.

• **Bullish News**—But when trading opened Wednesday, few were worrying about the Far East. Replacing such fears—on the surface at least—was optimism engendered by Election Day returns. The result: Many more buy than sell orders were on hand when that day's session started. And soon prices were sharply higher.

Nonetheless, the market's initial reaction to election returns wasn't an altogether convincing affair. Trading volume never came close to reaching the proportions it did Monday, when prices were breaking badly. All the vim of the "election rally" was compressed into the initial hour of trading.

• **Down, Then Up**—As a result, few Wall Street analysts have permitted



If You Believe in Precedents, This Is It

Traditionally, the market feels itself entitled to a Christmas rise. If you average the Christmas markets of the postwar years, the result looks like this; from which you might conclude that prices generally will close November somewhat under their opening, stage a slight rally to yearend. Big hitch: The market seems to be responding more vigorously to other things than it is to tradition (chart, above).

election returns to turn them into bulls—as to the market's near-term outlook. As was the case for some time before Election Day, the majority still feels uneasy over the price trend in the months immediately ahead.

Over the long term, Wall Street continues bullish. Few market counselors are suggesting sales out of well-selected long-term investment holdings. Most, however, still think trading clients should convert paper trading profits into cash, that long-term investors should postpone new purchases until the market has undergone the price shakeout they see ahead.

One main reason accounts for both the long-term bullishness and the short-term bearishness: the arms program now in the works.

As many Streeters see the picture, arms production will pump inflation into the economy, and this is bound to inflate stock market prices—over the longer term.

• **Trouble First**—But it's not going to do that immediately, they say. Shifting from a peacetime to a semiwar economy isn't going to be done without some dislocations. And the adjustments that will have to be made, this group thinks, are likely to be uncomfortable for many stocks, at least temporarily.

For one thing, this changeover could bring controls of various sorts—on commodity prices, on credit, on stock margins, perhaps further tightening of the controls already in effect.

And undoubtedly there will be continued pressure for higher normal tax rates on both corporate and individual incomes, for an excess-profits tax on corporations, for new excise levies. Another factor, too, will be hitting the net income of many corporations: the low profit margins on defense contracts.

Wage rates likewise seem destined to rise further. This will mean an increase in the cost of business operation, necessitate advances in prices of finished goods that may restrict the market. Working capital needs will grow. This will effect the corporate dividend payout, touch off a new wave of corporate borrowings.

The temporary operation of such factors doesn't necessarily spell an end to the 1949 -? bull market. It's not soil, however, out of which long-extended rallies grow. And most Wall Streeters think the stock market isn't going to flower bountifully again until the current period of uncertainty has passed.

Plenty of Bull-Market Profits Still Around

	Barron's Weekly Stock Group Averages					
	1949	*1950 Price Range*		*Recent*	*1949-50 Bull-Market Gains*	
Stock Group	*Low*	*High*	*Low*	*Level*	*At 1950 High*	*Recent Level*
Television	12.24	32.28	18.47	27.20	163.7%	122.2%
Steel and iron	50.05	101.98	65.36	99.80	103.8	99.4
Liquor	63.50	121.62	87.14	120.32	91.5	89.5
Automobiles	31.17	57.79	43.56	53.67	85.4	72.2
Rubber	42.47	75.41	52.47	72.06	77.6	69.7
Grocery chains	51.67	86.25	67.83	86.25	66.9	66.9
Paper	37.28	60.18	45.88	58.65	61.4	57.3
Packing	15.09	24.28	19.47	23.72	60.9	57.2
Farm equipment	83.38	133.97	97.28	131.00	60.7	57.1
Aircraft manufacturing	24.68	39.88	30.85	36.58	61.6	48.2
Retail merchandise	71.23	104.88	84.14	104.88	47.2	47.2
Investment trusts (leverage)	12.31	18.53	11.84	18.09	50.5	47.0
Machinery (heavy)	24.02	36.80	29.18	35.10	53.2	46.1
Insurance	96.30	138.85	116.56	138.85	44.2	44.2
Air transport	28.78	45.16	35.97	41.34	56.9	43.6
Electrical equipment	46.84	68.94	58.09	66.50	47.2	42.0
Office equipment	64.93	96.39	78.54	92.11	48.5	41.9
Dry goods chains	92.62	131.34	105.88	131.34	41.8	41.8
Railroad equipment	22.85	33.94	23.77	32.29	48.5	41.3
Oil	49.54	70.86	54.23	69.95	43.0	41.2
Copper, lead, zinc	41.66	59.18	45.88	58.31	42.1	40.0
Chemical	98.20	147.82	119.60	135.78	50.5	38.3
Foods, beverages	48.27	65.17	58.58	64.12	35.0	32.8
Textiles	59.00	80.75	63.75	76.78	36.9	30.1
Auto equipment	34.88	48.38	39.28	45.34	38.7	30.0
Building material, equipment	56.40	81.80	60.90	70.88	45.0	25.7
Banks	56.36	73.36	63.42	68.05	30.2	20.7
Instalment financing	50.19	68.88	50.34	56.41	37.2	12.4
Drugs	76.75	95.12	80.38	84.84	23.9	10.5
Motion pictures	31.88	36.91	30.75	34.91	15.8	9.5
Gold mining	25.81	33.31	24.75	27.84	29.1	7.9
Tobacco	48.81	57.50	49.72	52.41	17.8	7.4



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It's Hard to Get Rid of a Communist

Union contracts say discharges must be for "just cause"—and arbitrators rule Communist sympathies aren't cause enough.

Getting rid of a Communist sympathizer in your plant isn't easy. Most employers who have tried are finding that out. The worker has two potent weapons: the union contract or, if there's no contract, the Taft-Hartley law. Either one can block management's efforts to purge employees with pro-Communist leanings.

A look at recent arbitration awards shows what you may be up against. Carl R. Schedler, executive secretary of the National Academy of Arbitrators, cited four cases last week that tell the story.

Arbitrators usually must decide whether an employee's discharge was permissible under a union contract. They are limited by the actual language of the labor-management agreement; they can't go outside it and judge whether a charge of Communist leanings is valid—and whether, if it is, a Communist can be fired on that account.

• **Limited Help**—The McCarran Internal Security Act, passed in September, will cover that point for plants designated as a "defense facility" by the Secretary of Defense. In such plants (1) no Communist may hold a job, and (2) no Communist or member of a Communist front may apply for a job without disclosing his Communist connections. But, so far, no plants have received a "defense facility" designation.

Until they do, all that the arbitrators have to go on is the Dept. of Defense's security code. This seldom helps where communism is the reason for firing a worker. The Department's regulations only keep suspected subversives from working on classified government contracts. They do not bar them from jobs on nonsecret work.

So in all four arbitration decisions cited by Schedler, dismissal of employees for Communist sympathies had to be ruled down. In one case, an arbitrator upheld the dismissal, but on other grounds.

The cases:

I. Cutter Laboratories

Cutter makes vaccines, penicillin, and other pharmaceutical products at Berkeley, Calif. During World War II, it was under rigid security controls.

Cutter hired a woman as label clerk in 1946. Six months later, it learned that she had made false statements on her application for employment. She hadn't disclosed that she was an attorney, had been an enforcement attorney for the wartime OPA, and had been a cannery worker and organizer for the left-wing Food, Tobacco & Agricultural Workers (then CIO). Instead, she had listed a false previous job. Cutter also became convinced its new clerk was a Communist.

• **Mum**—It didn't tell her what it had learned or take any action against her at the time. She had just been named a shop steward by the Cutter union—the left-wing United Office and Professional Workers (then CIO). If the company had fired her, the union might have charged it was on the grounds of union activity.

Last year, the company finally confronted the woman with what it had learned against her and fired her for Communist activities. By then, the woman was president of her UOPW local and was heading tough wage negotiations with Cutter. The union fought the discharge. Its contract permitted firing only for "just cause"—and, the union argued, Cutter had none.

• **Too Late**—A three-arbitrator panel decided against Cutter and ordered the woman reinstated. It agreed that the company could have fired the clerk for "just cause" when it first learned that she had made false statements on her application. But, it said, it was no longer "just" to fire her two years later, when she had risen to power in the local union and was in the midst of wage negotiations.

"An employer should not be entitled to carry mutually known grounds for discharge in his hip pocket indefinitely for future convenient use," the panel said.

II. Consolidated Western Steel

CIO's United Steelworkers protested a discharge at Consolidated's Maywood (Calif.) mill. The arbitrator upheld the company's action—but not on its original grounds. The employee had been discharged because (1) he refused to tell a federal grand jury whether certain government employees were Communists, and (2) the company suspected him of being a Communist. Firing for these reasons was wrong, said the arbitrator. But the company did have "just

"Purged" Buick Worker Keeps Job

The first worker kicked out of the United Auto Workers (CIO) on charges of being a Communist was still on his job at the Buick plant in Flint, Mich., this week. But his tenure is shaky. Fellow employees—who once threw him out of the plant bodily—want him ousted permanently.

• **Dilemma**—That poses a problem for Buick. UAW has a modified maintenance-of-membership contract with General Motors, covering the Buick plant. It specifies that an employee must continue his membership in UAW or forfeit his job. Thus under the contract, UAW—after expelling the worker—could ask Buick to fire him.

But this clashes with Taft-Hartley. The law says that under such a contract a union can't require the firing of an expelled member, unless he was expelled for nonpayment of union dues. And that's not an issue in the Buick case.

• **20-Year Man**—The worker involved, Berry Blassingame, took a job at Buick in 1929. Last August, Blassingame tried to distribute Communist literature criticizing U. S. intervention in Korea. That led to considerable manhandling by fellow workers, who expelled him from the plant. Buick fired him for creating a disturbance. UAW, however, intervened, and Buick reinstated Blassingame.

Later, UAW brought Blassingame up for trial on charges of being an active Communist, and of distributing Communist literature. His subsequent conviction, under the union constitution, meant automatic dismissal from union membership. The union is now waiting to see if Blassingame is going to appeal the decision.

• **In the Middle**—Meanwhile, GM is caught in the middle. Firing the man on union demand undoubtedly would bring a court suit under T-H; retaining him, against union wishes, just as surely could lead to trouble with the Buick UAW local.

cause" for firing the man. He was off the job for 10 days while serving in jail on a grand-jury contempt charge.

III. Curtiss-Wright Corp.

Curtiss-Wright fired a worker for distributing a Communist pamphlet in the Columbus (Ohio) plant cafeteria during the lunch hour. The United Auto Workers (CIO) took the case to arbitration. The arbitrator ordered the employee reinstated. He held that the worker hadn't violated a company rule against solicitation during working hours—even though the pamphlet urged workers to "join the Communist Party."

IV. Spokane-Idaho Mining Co.

The company fired a shaftsman for violating a company rule against distributing literature without permission. The Mine, Mill & Smelter Workers (then CIO) local at Wallace, Idaho, took the case to arbitration, and won. The arbitrator agreed that handing out Communist tracts violated a company rule. But he ruled it wasn't "just cause."

His reasoning: The company doesn't ordinarily go so far as to dismiss for a first violation of its no-distribution rule. It did so this time only because the literature was Communist. But communism isn't illegal. Therefore, Communist literature can't be the basis of any action that doesn't follow the company's policy on other literature.

Steel Showdown

Big Steel gets down to real bargaining; 11¢ to 13¢ compromise looks likely. UAW settles at I-H and Autocar.

The wage showdown between U. S. Steel and CIO's United Steelworkers moved nearer this week; both sides were bargaining in earnest. The union wanted to get a settlement before the CIO convention opens in Chicago, Nov. 20; company negotiators were out to clear the way for defense production.

• **How Much?**—For both sides, the big question still was: How much?

Right now, negotiations appear headed toward an 11¢- to 13¢-an-hour compromise, with a possible 3¢ to 5¢ an hour more for workers through "fringe" payments. But it may take a lot of table-pounding to reach a deal.

• **New Settlements**—Meanwhile, settlements continued to pile up in other industries this week.

International Harvester and the United Auto Workers (CIO) settled a long, hard wage dispute—and strike—with a General Motors-type contract. It gives



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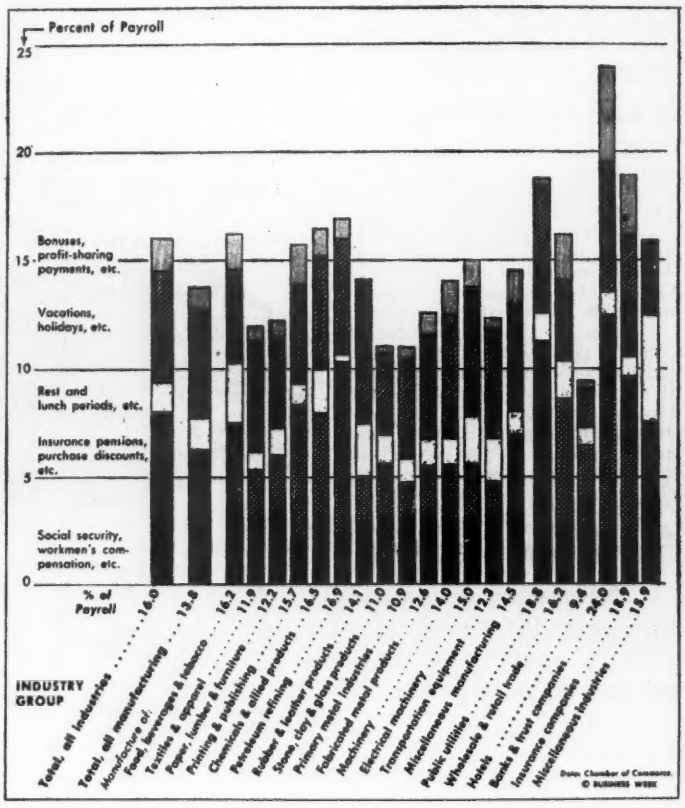
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an immediate 10¢-an-hour wage boost, calls for quarterly adjustments on the basis of BLS cost-of-living figures, and provides for annual "improvement factor" raises of 4¢ an hour.

The company and UAW also agreed on (1) a maintenance-of-membership clause that requires present UAW members in I-H plants to keep their membership (new employees must join UAW after three months); and (2) a joint study of a new wage-payment system to replace a current piecework plan. If one isn't worked out by Apr. 15, 1953, either party can end the contract.

UAW retains the right to strike over production standards at any time during the contract's run, but only after a vote.

In another UAW settlement, employees of Autocar Co. at Ardmore, Pa., ended the company's first strike last week. They accepted a three-year contract on the GM pattern: straight wage hikes ranging from 8¢ to 16¢ an hour, quarterly c-of-l adjustments, and an annual 4¢-an-hour raise.



How Nonwage Costs Add Up

Survey of 690 companies shows that "hidden" and "fringe" payments total 23.7¢ an hour—or 16% of payroll.

You can't measure the rise in industry's labor costs just by figuring out how much wages have gone up. Nonwage labor costs now run about 16% of management's whole wage bill. And they have risen sharply in recent months.

The Chamber of Commerce of the United States found that out when it checked the 1949 labor costs of 690 companies. It reported last week that nonwage expenditures of the firms averaged 23.7¢ per hour for each of their 4-million employees in 1949. That was $477 per worker.

• **Nonwage Costs**—The nonwage costs checked include all employer payments for employees outside of hourly wages and weekly salaries. They include:

• Legally required payments for social security, unemployment compensation, and workmen's compensation,

which averaged 4.3¢ per hour, or about 2.8% of payroll.

• Payments for time not worked, including paid holidays and vacations, paid rest and lunch periods, and paid wash, clothes-change, and get-ready time. These averaged 9.8¢ per hour.

• Pension and insurance payments, which averaged 7.4¢ per hour.

• Miscellaneous payments, such as bonuses, profit-sharing checks, suggestion-system awards, and Christmas and other special payments. These averaged 2.2¢ per hour.

These figures "undoubtedly understate" the actual nonwage labor costs in effect at the end of 1949, the chamber warns. It points out that "figures reported . . . are averages for the year; many important increases in nonwage costs were established late in 1949, so that their full effect is not shown."

The major steel pensions didn't come until the last two months of 1949. The costs for those two months are averaged over the whole year. So the pension cost in "primary metal industries" shows much lower than it actually is (page 122).

The chamber predicts "the substantial annual increases in nonwage costs will continue, barring wartime government action to freeze such increases."

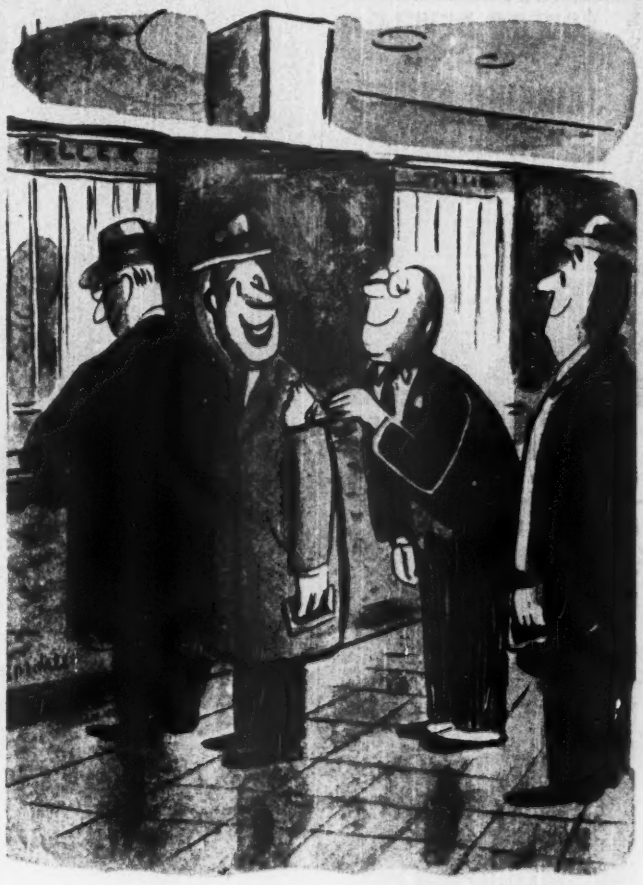
• **Payments Vary**—The amounts that the companies paid out varied a lot. Eighteen companies said nonwage costs added up to less than 6% of payroll last year; for 30 companies, they amounted to 30% or more. And 13 of these said they paid out $1,000 or more per employee in 1949 in nonwage labor costs.

The payments varied from industry to industry, too. Special bonuses and awards were usually a small item, but they amounted to 3.6% of payroll in banks and financial houses. Pension-plan costs amounted to less than 1% of payroll in five industries, but reached nearly 7% in banks and over 5% in insurance companies and public utilities.

How many employees a company had didn't seem to make any difference. One company with less than 500 employees paid 16.2% of payroll for nonwage costs; one with more than 10,000 paid 16.9%.

• **Second Checkup**—This was the chamber's second checkup of this kind. The first check was in 1948, on the basis of 1947 figures. The new figures show a sizable jump in costs (28%) since then.

The costs reported by 186 companies included in both 1948 and 1950 surveys showed: In 1947, nonwage costs averaged 19.2¢, totaled $393 a year per worker, or 14.4% of payroll; in 1949, the average was 24.8¢ per hour, or $505 a year; this amounted to 16.2% of payroll.



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LABOR POLITICAL HEADS Jack Kroll (CIO), Joe Keenan (AFL) plan for more unity.

Unions Mourn Political Defeats

Labor's unified political effort fails to produce a "friendly" Congress. Leaders puzzled by trend as even Taft scores heavily.

Labor's close political unity failed to produce enough votes this week to achieve the unions' goal: a "friendly" Congress.

The setback wasn't entirely a surprise in labor political offices. Checkups in 37 states a few weeks ago had indicated that serious reverses were ahead (BW—Oct.14'50,p112). But union political strategists had expected some important victories to counteract stinging defeats. Instead, they won fewer races than they expected. The "unfriendly" Congress looks even more "unfriendly" now to glum unionists.

• **No. 1 Target**—AFL and CIO, along with railroad brotherhoods and independent unions, set defeat of Ohio's Sen. Robert A. Taft as their No. 1 goal. They went all-out to score a psychological victory by wiping him out. But the co-author of the Taft-Hartley act won handily over labor-endorsed Joseph T. Ferguson. And so the story went in race after race across the nation (page 15).

For instance, the unions counted Sen. Scott Lucas of Illinois and Sen. Elbert Thomas of Utah as "friendly" candidates. Both lost. So did "friendly" Sen. Francis J. Myers, and labor-supported Rep. Helen Gahagan Douglas, running for the Senate in California.

Labor-endorsed candidates won Senate races in New York, Connecticut, Washington, and Kentucky.

• **"Unfriendly"**—The unions' campaign against "unfriendly" candidates was almost a total loss. Labor could claim a success only in the defeat of Sen. Forrest C. Donnell of Missouri.

The story was much the same in the House. At midweek, labor strategists still were figuring just how much they had lost there.

In many states candidates opposed by labor polled strong votes in heavy industrial centers. That was particularly true in Ohio. Taft piled up a big margin in industrial counties where unions worked hardest to defeat him.

• **Kroll Puzzled**—CIO's political director, Jack Kroll, who predicted President Truman's reelection in 1948 when nine out of 10 political forecasters didn't, called the 1950 voting "puzzling" and said: "Apparently there was an undercurrent—a trend across the country—that nobody could detect in advance."

As far as AFL and CIO are concerned, the 1950 setback won't affect political cooperation. Officials say they see "no reason to change our organizational or other plans." These plans call for closer AFL and CIO political cooperation in the future—with 1952 set as the big year for labor's political activities.



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Charity Overtime

Southern Line Material stages Good Neighbor Day. Workers get premium pay, hand it over to local charity.

Employees of the Southern Line Material Co., Birmingham, gave about $5,000 to local charities last week—and it didn't cost them a cent of their regular take-home pay.

• **"Good Neighbor" Plan**—Southern, an electrical-equipment manufacturer, normally operates on a five-day week, Monday through Friday. However, on Saturday, Oct. 28, it stretched the week to include a sixth, or Good Neighbor Day.

For the day, Southern invited employees to come to work at overtime rates—with the first five hours' premium pay to go into a joint charity fund. As its share, the company pledged the full profits from one day's regular production.

• **Early Morning**—Under the plan, workers reported to the Southern plant at 6:30 a.m. and worked for the charity fund until 11:30 a.m. Then the company had employees, their union officials, and representatives of the major charities as guests for a buffet luncheon. Afterward, employees had their choice of returning to plant jobs for three more hours—to earn a little premium pay for themselves—or of quitting for the day.

Plant executives, supervisory workers, and office personnel who are on fixed salaries also worked the extra time on an overtime basis.

Southern emphasized from the start that participation was entirely on a voluntary basis. But nobody among the company's 300 employees refused to work the five-hour charity shift.

• **A $5,000 Day**—All told, the plan raised close to $5,000 for eight charity funds—10 times what the funds got from the plant last year. Of the $5,000, employees contributed around $3,650, the company $1,360.

In return for the gift, the fund organizations agreed not to solicit Southern until next fall. The company will

The Pictures—Cover by Charles Rotkin. Acme—20 (top lt.), 24; Black Star—133; European—139; Joern Gerdts—48, 49, 50, 52, 55; Robert Isear—98, 100, 101, 102, 103; Keystone—104, 105; Libsohn, Standard Oil (N. J.)—20 (bot. lt., bot. rt.); U. S. Steel—21 (top rt.); White Construction Co.—21 (bot. lt.); Dick Wolters—31; Ida Wyman—124.

hold another Good Neighbor Day then, on the last Saturday in October.

• **Everybody Benefits**—The overtime plan, M. L. Ruggieri, Southern general manager says, is practically ideal. Everyone benefits. The employee has the satisfaction of giving and still has his regular "take-home pay." The company saves production time because "it won't have to solicit each employee six to eight times a year for fund drives."

The charities benefit through larger collections, received in a lump sum.

Program for Vets

UAW lists seven demands to make of employers in negotiating on rights of drafted workers. Pension credits is the tough one.

Employers got a clue this week as to what unions expect them to do for drafted workers. The United Auto Workers (CIO), always a policy-setter, provided it. UAW issued a seven-point program for local unions, aimed, it said, at averting another deluge of postwar veterans' grievances.

• **Points to Negotiate**—UAW urged its locals to negotiate an agreement with employers on the program. It would:

(1) Establish joint labor-management committees on military deferments—giving the union a voice in deciding who is "essential" and who isn't.

(2) Guarantee reemployment rights for veterans regardless of the type of discharge they get. Many employers refused to rehire servicemen with dishonorable discharges after World War II.

(3) Provide that "probationary" employees (those hired with the understanding that their jobs depend on their meeting work standards set by the employer) are to be considered "regular" employees in figuring draft privileges. As such, they have guaranteed reemployment rights.

(4) Assure workers that they won't miss any job opportunities if drafted. UAW says: "If promotional opportunities occur during a worker's absence in military service, provide that similar opportunities be opened to him upon his return."

(5) Make vacation money payable for the year a man enters service and for the full year of his return.

(6) Permit draftees to pay for and continue life, hospital and surgical, and medical insurance for his family's benefit, if not his own, during absence in the armed forces.

(7) Let pension credits accumulate during the period of military service. UAW offered no details about how this should be done—though this may prove

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to be the stickiest problem of all. Most UAW-negotiated pension plans require a certain number of hours of work each year as a basis for pension credit.

• **Major Problem**—Pension and insurance credits already loom as the major problem for employers under the new draft act (BW—Oct.7'50,p124).

Scraping Bottom

Surplus manpower is nil in one-third of the nation's main industrial centers. It's only the beginning.

Employers in one-third of the nation's main industrial areas reached the bottom of the manpower barrel during September. As reserves dwindled nationally, Robert C. Goodwin, head of the Office of Defense Manpower, reported "the most dramatic tightening of the labor market since World War II."

• **Only the Beginning**—And Goodwin warned that it's only the beginning. Industry must expect "a progressive tightening of labor-market conditions, growing shortages in an increasing number of occupations, and a sharp pickup in recruitment of manpower for defense" (page 31).

This will be due, he said, to continued strong demand for civilian goods; greater competition for manpower between defense contractors and military establishments expanding their civilian staffs; and withdrawal of manpower from the work force to build up the armed forces toward a goal of three million.

• **Signs of the Times**—The country got further evidence this week of how manpower is tightening:

• The Census Bureau reported a drop in unemployment to 1,940,000 in early October. This was the lowest level in almost two years.

• Employment at the same time was 61,764,000, second only to the record 62,367,000 in August. The slight, seasonal drop is due to a cut in farm employment and the return of summer workers to schools during September.

• Unemployment dropped in all but three of the 150 major metropolitan areas surveyed by the U. S. Employment Service.

• The number of tight labor areas—the so-called "A" areas—more than doubled, from 20 to 51, between July and September. New areas in the group in which there is less than 3% unemployment include: Chicago, Kansas City, Minneapolis-St. Paul, Portland, Me., San Francisco, Spokane, Grand Rapids, and Richmond, Va.

• Heavy unemployment areas—"E" areas with more than 12% unemployment—dropped from four to two: Scranton and Wilkes-Barre, Pa.

• Almost 100 of the 150 areas moved up at least one notch into a tighter labor category. The latest count shows 57 areas with 3% to 4.9% unemployed; 33 areas with "moderate labor surplus" rating of 5% to 6.9% jobless; and seven areas with a "substantial" surplus of 7% to 11.9% unemployed.

• In the past year, areas with less than 5% unemployment jumped from 31 to 108, while those with more than 7% unemployed dropped from 68 to nine.

• **Defense Production Impact**—The tightening in most areas did not result much from defense activities, according to Goodwin. Seattle, San Diego, Wichita, and other aircraft centers were exceptions.

However, the USES' 150-city survey noted the beginning of "the real impact of defense production." It reported spotting the first effects of "a heavy sprinkling of government contracts" for munitions, aircraft, ship repairs, trucks, ordnance, communications equipment, machinery and metal products, textiles, apparel, and food.

LABOR BRIEFS

Tight slacks caused a one-day stoppage at Bendix Corp.'s Detroit carburetor plant last week. One employee slugged another for making a pass at his wife. When the slugger returned to work, Bendix UAW women quit. They protested: If a pass was made, the wife provoked it with the "tight-fitting way she wears her clothes."

•

A hunting holiday kept SKF Industries' plant in Shippensburg, Pa., closed on Nov. 1. The SKF-UAW contract provides for a paid holiday on the first day of Pennsylvania's small-game season—instead of election day.

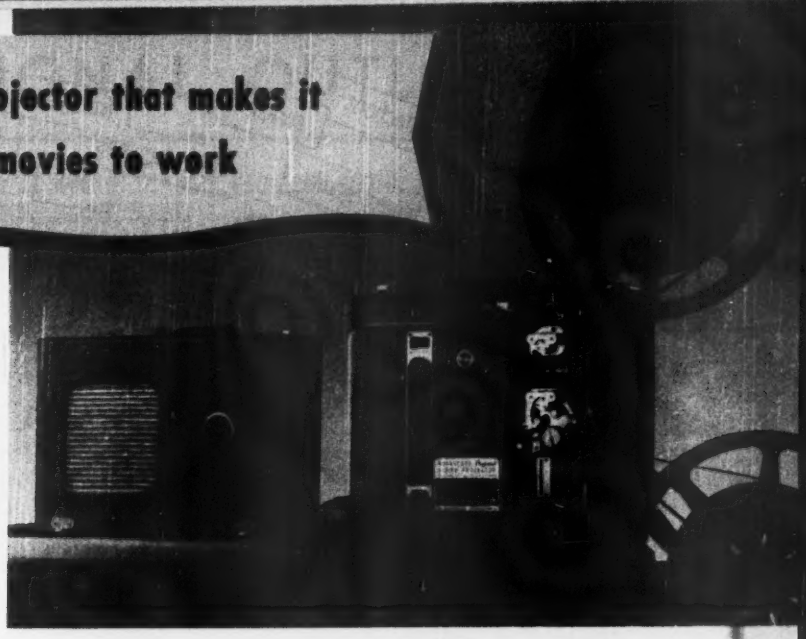
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The thrift plan in effect at Standard Oil Co. (New Jersey) has helped employees pile up $83.6-million since 1936. The plan permits employees to pay as much as 10% of their wages into the fund; the company adds up to 3% of the employee's pay, also makes extra payments when profits run high.

•

Profit-sharing checks covering third-quarter operations of Minnesota Mining & Mfg. Co. hit a company high, $538,804 to 7,300 employees. . . . W. A. Shaeffer employees have just been voted 38% of overtime-swollen wages for September, October, and November under their profit-sharing plan.

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INTERNATIONAL OUTLOOK

SERVICE

The international situation looks bad—even if you assume that Stalin wants to avoid a general war.

The immediate goal of the Chinese Reds seems to be a buffer zone in northern Korea. They want something between U. N.-occupied territory and their Manchurian border.

But Stalin can count on Chinese intervention to help him in a broader plan. He is maneuvering to:

(1) Regain the initiative from the U. S. in both Asia and Europe.

(2) Force the U. S. to negotiate about the future of Japan (page 133), Germany, and Korea.

(3) Undermine the U. S. plan to have the U. N. General Assembly rather than the Security Council take on the job of checking aggression.

•

Stalin probably doesn't expect the Chinese to shove U. S. troops back to the 38th parallel.

Any attempt to do that would start a full-scale U. S.-China war. And it's doubtful if Mao Tse-tung is ready yet to risk the fruits of his 20-year struggle for power. He held out until the last minute against Moscow's insistence on intervention.

But a long struggle in northern Korea looks inevitable. This would tie down U. S. forces indefinitely.

Also, it would prevent the kind of rehabilitation the U. S. has been planning for Korea. Washington had hoped to make the new Korea a Far Eastern model of agrarian reform and social progress.

•

Indo-China could become the scene of a new crisis.

France's position there gets weaker every day.

The U. S. may soon face this choice in Indo-China: Send in U.S. troops, or watch the Communists take over.

It's hard to see how the British can help the French much, unless they weaken themselves in Hong Kong and Malaya.

Of course, Chiang Kai-shek probably would send forces to Indo-China. But there's no sign yet that Washington wants Chiang's help.

•

Korea and Indo-China may speed up Washington's plan for an Allied High Command for Asia.

The idea is this: Highly mobile forces from other countries beside the U. S. are needed in Asia. If you are going to move these forces quickly from one fire to another, you need unified direction.

General MacArthur would be the logical man to head such forces.

•

French leaders are scared to death by the latest turn of events.

Paris thinks the Chinese intervention in Korea means either (1) the start of a third world war or (2) the sopping up of Western strength by an endless struggle in Asia.

Either would leave France wide open to Russian attack.

So French officials want top-level East-West talks as soon as possible. The goal: to get Western troops out of Korea at any price in order to win time to build Western Europe's defenses.

•

These new French fears have brought second thoughts about the problem

of rearming Germany (BW-Nov.4'50,p137). There's a good chance now that the Pleven government will offer this kind of compromise:

(1) German rearmament would start as soon as the Western European nations (excluding Britain and Scandinavia) agree in principle to economic and political federation. Then West Germany could be armed at the same time the federation is being built up. (In the original French plan there would have been no German forces until the federation had been actually formed.)

(2) Military units from all federation members, not just from West Germany, would be limited to regimental combat teams instead of divisions. This would partly answer the German demand for equality.

•

The French still insist, though, that Bonn must join the Schuman coal-steel pool before any German forces are called up.

According to reports from Frankfurt, the Bonn government is ready to join up after a little bargaining (page 138).

But the French are worried that the Germans will balk at the anticartel clauses of the Schuman Plan treaty. These clauses outlaw vertical integration.

Some Lorraine steel companies own coal mines and won't like this. But it's in the Ruhr where this kind of integration has gone furthest.

•

France's dollar gap—one of the biggest of any country's—is shrinking fast.

French exports to the U. S. in September jumped to a record $12.5-million, 42% above August—thanks to American stockpiling. Imports from the U. S. dropped nearly 50% (to $18.5-million), partly because of U. S. export controls.

That leaves France with a September deficit of only $6-million—one-sixth the September 1949 deficit and less than the prewar average.

This favorable tilt in France's trade balance lends some weight to the rumor that the French Exchange Stabilization Fund has quietly bought up $150-million worth of gold during recent weeks.

•

Paris has high hopes that its favorable dollar position will last.

For one thing, France will net $50-million over the next 12 months from the sale of 112-million gal. of French alcohol to the Reconstruction Finance Corp. (BW-Oct.7'50,p133).

Moreover, U. S. orders for French steel since Korea already are greater than French steel exports to the U. S. during the whole of 1949.

•

London likes the looks of a new U. S. private investment in Africa.

Last week two New York financial houses, plus the Rockefeller's International Basic Economy Corp., bought shares in Tanganyika Concessions. This is a British company that owns Belgian Congo mining and rail interests.

London figures that this is "solid" U. S. capital. The Rockefeller money is especially welcome in Africa. Up to now IBEC has stuck pretty close to Latin America.

The British Treasury gave the American investors a good deal. Among other things, they can get their money back in dollars at the official exchange rate any time they want to.

That's the first time the British Treasury has granted such permission to an investor in an overseas project. It may set a pattern for future deals.

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BUSINESS ABROAD



STEEL MILLS will produce for development of Southeast Asia.



SHIPYARDS in Japan will again build for Asian trade routes.

Japan Will Be Factory for Free Asia

U.S. wants peace treaty to drop curbs on Japan's trade, industry, and defense. Russian objections won't delay this plan long.

The U.S. is grooming Japan to be the industrial leader of non-Communist Asia. That's the gist of Washington's proposals to other members of the Far Eastern Commission for a Japanese peace treaty.

• **Clean Bill of Health**—In effect, the U.S. plan is to give Japan a clean bill of health. The kind of peace treaty we want would remove all restrictions on Japanese industry and trade. It also would allow Japan whatever armed forces it needs to defend itself.

Of course, Japan still has something to pay for its defeat in 1945. The Bonin and Ryukyu (Okinawa) Islands would be placed under a U.N. trusteeship, with the U.S. acting as the trustee. The disposition of its other former territories—the Kurile and Piscadore Islands, Formosa, and the southern half of Sakhalin Island—would be decided by the Big Four (U.S., Britain, U.S.S.R., and China).

For several weeks now, John Foster Dulles, State Dept. quarterback on Japanese affairs, has been trying to sell this U.S. policy to the other members of the Far Eastern Commission. Even Russia has said it's now willing to discuss a Japanese treaty. If Moscow should renege on this, Washington will go ahead without Russia.

• **Considerations**—Two big considerations lie behind the U.S. desire to rebuild Japanese industry and trade as soon as possible. First, there's the feeling that it's time for the Japanese to pay their own way in the world—except for defense costs. Then there's the belief that Japan is needed as the biggest industrial supplier, and an important financier, of U.S.-sponsored aid programs in Southeast Asia.

• **Defense**—As for defense, Washington officials have long thought of the dollars that could be saved if Japanese troops took over a bigger part of the job of defending Japan. Korea has buttressed this thinking. And since Washington still feels the real military threat today is in Europe, U.S. troop commitments in the Far East will be kept at a minimum.

The U.S. has no official plans to recruit a Japanese army now. But Gen. MacArthur is doing some spadework on his own. When U.S. troops were called to Korea, MacArthur added 75,000 men to Japan's centralized police force almost overnight. The total force will be about 200,000 by year's end. Military men figure they could produce from 10 to 16 combat divisions in Japan within a few weeks if they could get the equipment.

• **Policy of Expediency**—Expediency has dictated U.S. policy on Japan ever since the war. At first, Gen. MacArthur proclaimed his intention of making the former enemy the "Switzerland of Asia"—permanently neutral, industrially emasculated. Now U.S. officials, including MacArthur, see Japan as "the Britain of Asia"—banker, processor of raw materials, and maybe arsenal for non-Communist Asia.

In May, 1949—when the Communists were running wild on the Chinese mainland—MacArthur called a halt to all further reparations from Japan. This kept almost 900 steel, chemical, machine-tool, electrical equipment, and synthetic rubber plants from being dismantled and shipped to such places as the Philippines and China. Since then, MacArthur's men have gradually increased their support for development of heavy industry, including shipbuilding.

• **Why Heavy?**—They are backing heavy industry against light for two reasons: First, many U.S. businesses fear competition from the cheap products of Japan's light industries; and second, Japan's contribution to economic development and defense is considered indispensable.

The Japanese have been quick to take up their cue. The Japanese government's Economic Stabilization Board, apparently with MacArthur's blessing, has begun a study designed to boost exports of "basic materials, such as machinery and metal goods," to Southeast Asia.

• **Stronger Trade**—Current U.S. policy is aimed, too, at restoring Japan's trading position in the Far East. Lack of markets—not lack of production—has prevented postwar Japan from paving its own way economically. Since 1948, the U.S. taxpayer has carried a burden of $1.1-billion in economic aid alone.

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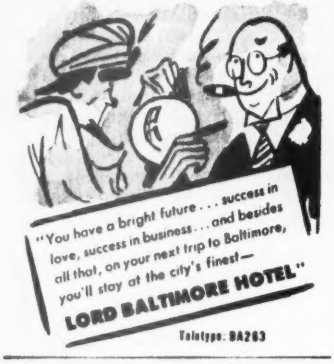
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ment boom, Japan is now balancing its trade accounts. In August, for the first time since the war, Japan sold more abroad than it bought or received as American aid. Unofficial September figures show Japanese exports at $74-million and imports, including U.S. aid, at $44-million. This big favorable balance is likely to be temporary. But Japan's trade volume is sure to go up substantially now that Japanese industry is slated to produce a good share of the Korean rehabilitation program.

• **British Block**—The U.S. would like to see a lot more Japanese exports go to Southeast Asia. But so far the British have fought this tooth and nail. The British have taken over most of Japan's prewar markets in Southeast Asia—and wherever else they can keep out Japanese goods through the restrictive devices of the British exchange control system. During the first half of 1950, Indonesia and Thailand (Siam) were the only countries in Southeast Asia that bought sizable amounts of Japanese goods. Burma and Malaya bought almost nothing.

The British, like the Americans, fear the competition of cheap Japanese goods. Also the British would like to keep as much of the Southeast Asian development for themselves as they can. Nor do they like Japanese buyers competing for rice and raw materials and thus bidding up the price.

• **Unrealistic?**—U.S. officials think this British policy unrealistic. They don't believe that British industry will be in a position to do much of the development business in Southeast Asia for many years. They also think Japan must inevitably regain much of its former position. They look forward to the return of the Japanese yen as a major trading currency in Asia. (Japan's improving trade position has already strengthened the yen in foreign markets.)

As the British pound gets stronger and stronger, Washington becomes more impatient with the way Britain restricts Japan's trade. The U.S. feels very definitely that the Southeast Asians, the Japanese, and even the British stand to gain a lot by letting competition return to Asian trading posts.

• **Peace Session**—Washington expects to iron out these difficulties with Britain in the course of the Japanese peace treaty talks. The real snags are expected from Russia. That means that delays and frustrations are almost certain. But this time, the West will probably be able to come up with a workable solution of its own, which Moscow can take or leave.

Russia is sure to insist that Communist China be consulted on the treaty. But State has no intention of negotiating with the Peiping regime so long as it is not a member of the United Nations. And Chinese Communist intervention in Korea, Indo-China, and Tibet all make Peiping's bid for admission to the U.N. a dead issue for the present.

The State Dept. is firmly convinced that Russia's primary objective in the Far East is to get control over Japan. Many officials believe that it was Russia's failure to do this by diplomatic tactics, or by subversion, that led the Kremlin to set off the war in Korea. A quick conquest of Korea certainly would have had serious repercussions in Japan. Conversely, State argues, a U.N. victory in Korea will completely undermine Russia's Japanese strategy.

• **Hands Tied**—The fact is that Moscow can do little to prevent some sort of settlement between Japan and the non-Communist world before too many months are out. The only industrial power in Asia cannot be kept under permanent wraps.

U.S. Passes Up Chance For Canadian Aluminum

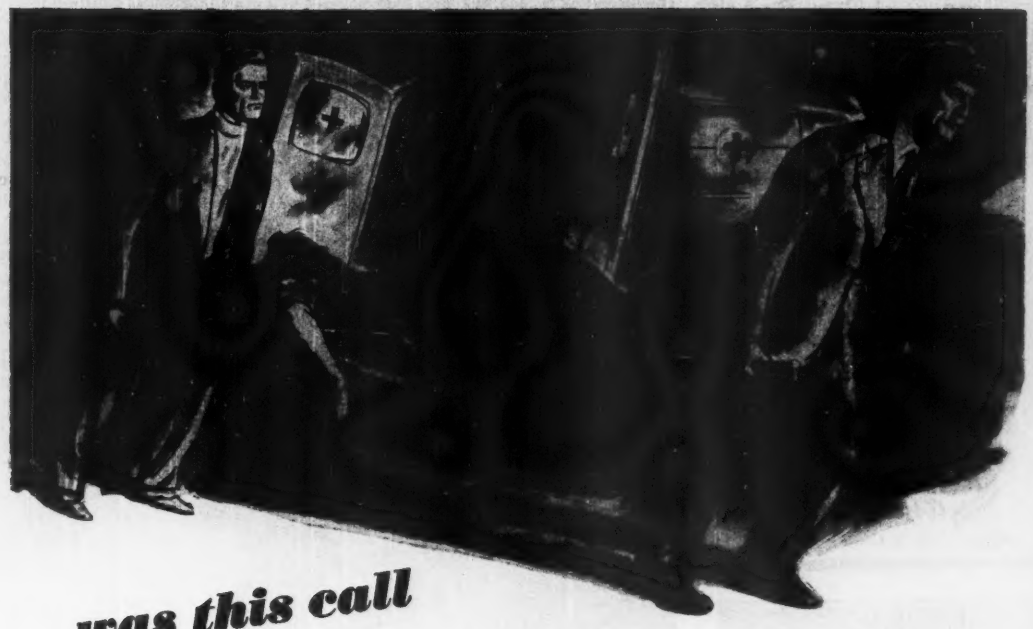
Canada's hopes of selling aluminum to build up the U.S. stockpile seem to be withering on the vine. Last week the National Security Resources Board decided it would concentrate on home production first, then consider imports.

Right after Korea, Aluminum Co. of Canada offered to sell the U.S. 440-million lb. of aluminum (about $75-million worth). The Canadians wanted the business; and it seemed to them that the U.S.—with meager aluminum stockpile—would be anxious to buy. But last week, the deadline for the acceptance of their offer passed with no word from Washington.

• **Mad Partner**—Canadians are obviously piqued. What annoys them most is that the ink is hardly dry on the economic-cooperation agreement between the two countries, signed two weeks ago in Washington (BW—Nov. 4'50,p138). Some Canadians question the sense of promising to work together, to combine resources, for the common defense if the U.S. won't accept cheap, readily available aluminum from its partner.

The big reason for the U.S. rejection of the offer is that domestic producers are going all-out to boost capacity—by as much as 2-billion lb. annually (BW—Oct.21'50,p25). In light of that, some trade and political quarters raised a howl of protest when the Canadian offer arrived.

• **Breath of Life**—But the deal isn't completely off for the Canadians. Chances are that some bargain will be struck over the Alcan aluminum as soon as U.S. expansion plans are hammered out.



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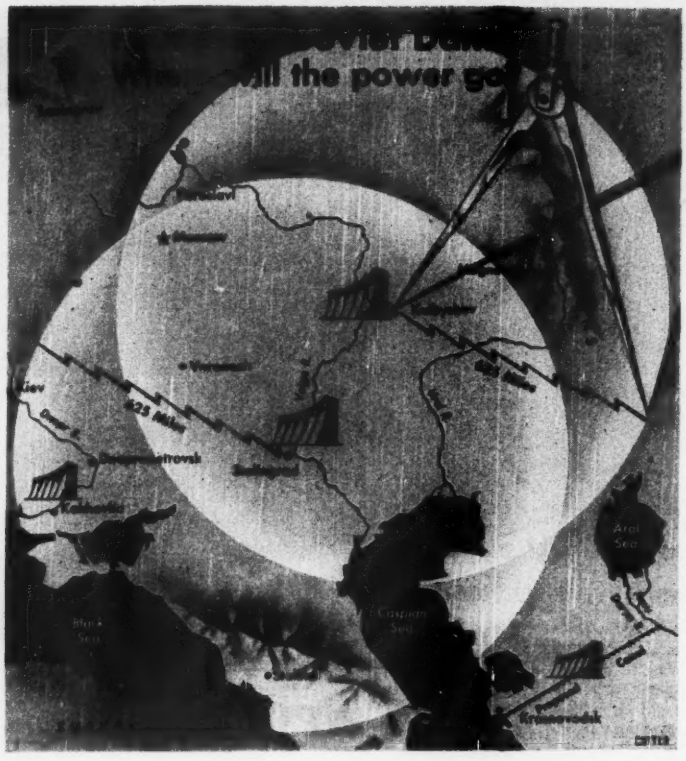
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Power for Peace, Says U.S.S.R.

But U. S. bets huge hydroelectric power project is slated for atomic installations. Dams will boost Soviet power output 25%.

The U.S.S.R. has just launched one of the most ambitious programs ever conceived in its 30-year drive for industrial might. Soviet Man has been told to roll up his sleeves for a gigantic hydroelectric power project—to make deserts bloom and to set factories humming. This week, the program will be the theme of a monster Moscow rally commemorating the 33rd anniversary of the Bolshevik revolution.

The plan: a chain of hydro plants —to be finished in the middle 50's— with a yearly production of more than 20-billion kwh. The two biggest dams —at Stalingrad and Kuibyshev—are each to have a power capacity greater than monster Hoover Dam in the U. S. All told, the project is supposed to boost Soviet power production by 25%, up to around 100-billion kwh. annually. The U. S. will generate more than 300-billion kwh. this year.

• **For What?**—Experts in the U. S. are betting that the new power is slated for huge atomic installations—like our own Oak Ridge. But the Russians say the development is for irrigation, improving Volga navigation, cattle-breeding, and supplying electricity to Moscow and other cities. For example: The Kuibyshev station is to irrigate 2.5-million acres; Stalingrad, 14.8-million acres; plants to be built along the proposed Caspian Sea-Amu Darya River canal are slated to reclaim more than 20-million acres.

But it isn't likely that Moscow is the big target. For one thing, the new power would come into Moscow at ultrahigh voltage; (the Russians talk of 400,000 volts; Hoover Dam transmits at just under 300,000 volts). That would mean a costly revamping of the city's electric system. Besides, Moscow is already well-fixed with power from plants in central Russia (BW—Nov.10 '45,p113).

• **Clues**—The Council of Ministers of the U.S.S.R. has given a hint: It decreed that the Stalingrad and Kuibyshev stations each must direct 10-billion kwh. yearly to a single point 500 to 625 mi. distant (map, above). And they

wanted most of the power for "industrial use." Observers here figure that a huge new industry is to be spotted either in the triangle formed by the bend in the Volga between Kuibyshev and Stalingrad or high in the Ural Mountains. There are important uranium deposits in the Urals; also the almost legendary industrial center of Magnitogorsk, arsenal of the Red Army, is located there.

It's all for peace, say the Russians. But there's room for doubt—if you follow the rule of thumb that the Soviets never fail to accuse the U. S. of doing something they are about to do. A quote from Izvestia gives a lead: "American hydroelectric plants are working for war. Who is ignorant of the important role played in American war industry by such government powerplants as the one in Tennessee and at Bonneville, which are now feeding atomic bomb plants?"

• **Big Doings**—The sudden, feverish activity marking the announcement of the hydro projects indicates that something big is afoot. It's routine Soviet doctrine to raise production levels all down the line, rather than to go all out in a single field.

Even before final blueprints were drawn, steel girders were pouring out of the steel mills at Stalinsk and Dnepropetrovsk; plants at Yaroslavl and Voronezh began turning out machinery for the power stations. Whole families were uprooted—in line with Stalin's "human engineering" techniques.

• **Obsolete?**—There's an interesting footnote to the hydro scheme in Moscow's Literary Gazette: Just before the project was announced, a Soviet physicist declared that he had perfected a way to make electric power from atomic energy. Moscow doesn't seem to be afraid that will make the huge power stations obsolete.

Opel Output Upped

FRANKFURT—If present plans pan out, General Motors will have its Adam Opel works at Ruesselsheim turning out about 110,000 vehicles in 1952. That will put Opel almost back to its prewar output and about 50% ahead of this year's production. This GM subsidiary is West Germany's biggest auto maker next to the Ford Works at Cologne.

Opel already has spent $8-million to $10-million rebuilding and reequipping its plant. Repair of direct war damage won't be completed until the end of this year. The projected expansion and modernization will cost another $18-million or so.

The company has no plans for new models right now. Sales of current style Opel cars and trucks are regarded as highly satisfactory both in foreign markets and in West Germany.


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Steel Pool Gains

Germany now seems ready to go along with Schuman Plan. It may hasten big-power agreement on rearmament.

FRANKFURT—After months of backing and filling, the Germans seem to be making up their minds on the Schuman Plan. Chancellor Adenauer is determined to accept it without much more bickering. And the Ruhr industrialists—though not completely happy—are going along.

The step may help clear the way for an early agreement on rearmament. The French have insisted that the Germans sign up for the coal-steel pool before they can have any troops (BW—Nov.4 '50,p137).

• **Conditions**—German big-steel men, however, want a couple of conditions fulfilled before they knuckle under to the coal-steel pool. They want permission from the Allies for unqualified expansion of their steel production. And they have their eye on a continuous strip mill, too.

The 11.1-million-ton limit originally set for German steel production has been dropped; but there's still a ceiling of sorts. Increases are supposed to be tied to Germany's contribution to Western defense (BW—Oct.21'50, p125). Rumors from the current Allied negotiations on Germany indicate that a limit of 14-million to 15-million tons a year may be forthcoming. But even that boost leaves the steel men, who want no ceilings at all, less than enthusiastic.

• **Strip Mill**—The strip mill is very much on the Ruhr mind. The Ruhr Iron & Steel Institute is pushing a proposal for building the mill in connection with the reactivation of the famous August Thyssen steel works, at Hamborn in the Ruhr. The present permit for reactivating Thyssen allows a yearly capacity of only 600,000 tons of pig iron, 117,000 tons of steel. The steel men want it rebuilt up to 40% of its prewar capacity—2.3-million tons a year. That would support a strip mill, turning out 50,000 to 60,000 tons of sheet steel monthly.

• **Cost**—The Thyssen job will cost plenty. Plans would come to $30-million for the plant itself, plus another $24-million for the strip mill.

But the steel men aren't too worried about finances. They argue that the German auto industry, as well as other sheet steel users, are expanding; they would probably be willing to up the price paid for steel. Moreover, say the steel men, there's a lot of equipment already on hand.

BUSINESS ABROAD BRIEFS

Chile's first oil refinery will go up 80 miles south of Punta Arenas, world's southernmost city. The plant, to be finished next June, will process 6,000 bbl. of crude, 30-million-cu.ft. of gas daily. Hudson Engineering Corp., Houston, will build it.

•

The Yanks are coming: British travel agencies are doing their best to encourage Britons to vacation on the continent next summer. They want plenty of beds open at home for dollar-spending Americans (attending the Festival of Britain).

•

U. S. cars in Indonesia don't have any red glass in their stop lights. Thieves get to them as soon as they arrive, sell red glass to "jewelers" for ruby rings, other trinkets. Demand is hot for yellow fog lights, too.



BUTLIN makes millions home. But he's . . .

Unlucky Abroad

Billy Butlin, Britain's fabulous vacation tycoon, made millions at home with his holiday camps. But his attempt to set up a low-cost, assembly-line resort on Grand Bahama Island, just off the Florida coast, hasn't panned out (BW–Jan.28'50,p112).

This week, a Nassau, BWI, court will resume hearing creditors' claims against Butlin's Bahamas, Ltd. The camp had 18,000 visitors from April to the September closing, but still owes close to $2-million.

The assets of Butlin's British company, however, aren't involved in the Caribbean disaster.

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Enough of Cesspool Politics

Now that the election mud has settled, this nation may well ask itself: How much longer in this day of world tension can we afford to tolerate political campaigns dealing largely in lies, slander, and the evading of real issues?

It is true that habit does die hard. It is also true that there may be a certain purgative effect in the tradition that lids fly and steam boils up at election time. But the campaign just ended cannot be more than half defended on such grounds. It was from every point of view a nasty spectacle and one of which Americans have good reason to be alarmed and ashamed.

Both parties pandered with an almost obscene joy to the public appetite for slander. Both parties assumed that the percentage of fools in the electorate who neither think nor remember is far higher than the proportion of the intelligent, and acted on that assumption. The campaign for Mayor of New York City played this refrain: "You're a crook, but I'm honest." In Pennsylvania, the Democrats were charged with being too friendly to Stalin. In Ohio, the Democrats charged Republican Sen. Taft with paralleling the Communist party line.

What kind of country has ours become if we are, as campaign oratory insists, the dupes of fools, gangsters, and perverts? What good is our educational system if it teaches our politicians to use the technique of the big lie without shame and our public to accept it without question?

What kind of a loose-jawed monster do we seem to a world that we expect to trust us? At a moment when everything this country does is flashed by movies, radio, and television to the world, these cesspool politics are less than ever defensible.

The man who told James Reston of the New York Times that he wished he had two votes so he could cast them against both parties expressed an attitude that should no longer be disregarded. For the harm done by low-grade campaign performances is serious. Now it is time for intelligent citizens to demand a better performance from many of our political leaders.

Unless the major political parties can appeal on a higher basis to intelligent voters, they must face the prospect of disintegration. Their candidates have avoided taking stands on clear-cut issues, preferring to deal only in personalities. They avoid issues because they are trying to gain support from voters of all stripes and beliefs.

Divisions of opinion and differences on basic issues are found within the parties themselves. There are conservatives in the Republican and the Democratic camps; there are liberals in both parties. The candidates are afraid to lose any of their following, regardless of whether they share the same political opinions on important problems of the day.

In this country there are many decent, honest, devoted men and women in politics. The time has come for them to assert themselves. They still have a chance to turn the political mechanism of this country into ways that are more truly representative of American democracy and fair play.

CCC in Reverse

The Commodity Credit Corp. has been the berated custodian of unwanted agricultural surpluses during the past few years. Now it is becoming the benevolent dispenser of scarce commodities.

Export quotas, clamped on to preserve our dwindling cotton supply, are a dramatic instance of the trend that has been going on since the Korean war began.

This is the third time in 14 years that events have gotton CCC out of jams that seemed hopeless. A drought did it in the 30's. World War II did it in the early 40's. And now Korea has relieved the pressure again.

The latest recurrence appears to cast a temporary glow of virtue over price supports for farm commodities. But, if commodity pressure groups take advantage of the new situation to push through raids on the U. S. Treasury, such as that staged last year for potatoes, the glow of virtue won't last long. Not even a Korean war would have done much to reduce that costly and inexcusable error. But if the commodity groups show restraint, price supports may be given a chance to form the basis of our agricultural policy. And an acceptable, workable agricultural policy we sorely need.

Our Titled Crook-Catcher

If the director of the FBI were British, he would now be ordering new calling cards inscribed "Sir J. Edgar Hoover, KBE." The King's Ambassador has just handed him the insignia of a Knight Commander of the Most Excellent Order of the British Empire "in recognition of the outstanding contribution he made to the Allied cause." (Dated 1947, this is obviously for wartime exchange of military intelligence between his office and that of his opposite number in Britain.)

Being a more or less plain American (he already has 16 LL.D. degrees and the most popular tourist show in Washington), Mr. Hoover can accept this high honor. But he cannot use the title that goes with it. Worse, being a government official, he cannot keep the handsome new trinkets that symbolize it, but must park them with the State Dept. until he leaves government service. Then our super-cop can assume the full glory of an eight-pointed star for the left breast and a badge to be worn suspended from the neck by a rose-pink ribbon edged with pearl gray. Mighty handsome. And earned.

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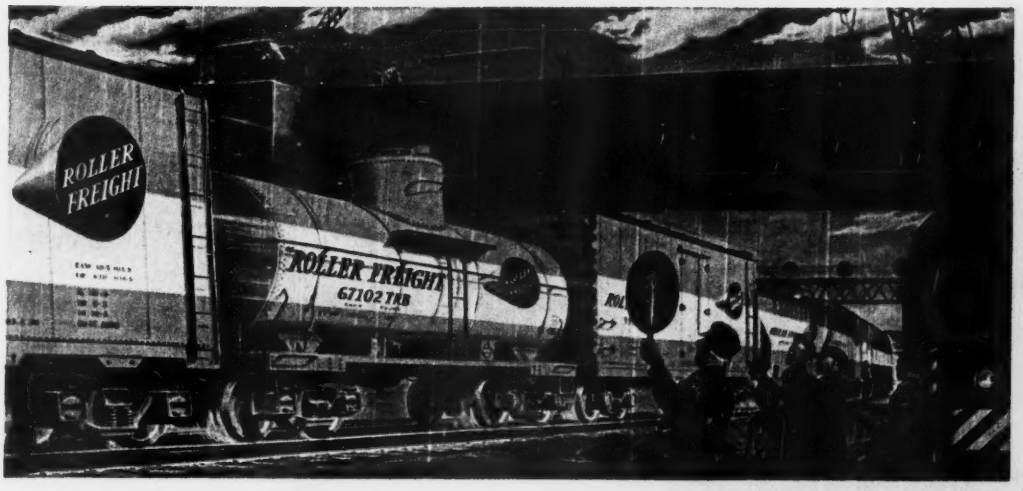


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With Timken bearings on freight car axles, "hot box" delays are eliminated, maintenance time reduced. Since Timken bearings reduce starting resistance 88%, "Roller Freight" gets under way smoothly without jars and jolts. The things you eat and wear and use will reach you faster and in better condition with "Roller Freight".

Already the switch to "Roller Freight" has begun, ranging from a few cars on some railroads to as many as 1000 on others.

Throughout industry, Timken bearings are first choice. Whether you build freight cars, machine tools, or airplanes, make sure the trademark "Timken" is on the bearings. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO". Tapered Roller Bearings, Alloy Steels and Tubing, Removable Rock Bits.



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